

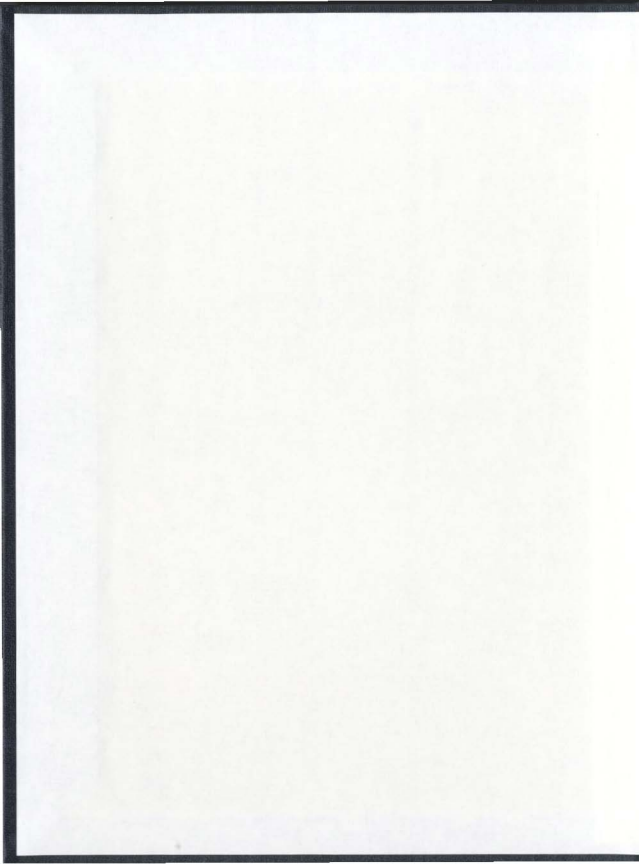
TOWARDS COGNITIVE ASPECTOLOGY:
THE SUBSYSTEMS OF LEXICAL ASPECTS

CENTRE FOR NEWFOUNDLAND STUDIES

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VALERI I. VASSILIEV



TOWARDS COGNITIVE ASPECTOLOGY:
THE SUBSYSTEMS OF LEXICAL ASPECTS

by

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ABSTRACT

In this thesis a system of lexical aspects, or Aktionsarten, is considered from the point of view of Guillaumian Psychomechanics, which is a form of cognitive linguistics. Guillaume proposes that verbal systems have developmental stages, the total system of stages being called the chronogenesis, that is the development of the time image. We have proposed the existence of pre-chronogenetic levels, which concern the development of the event image of the lexeme, which in Guillaumian terms concerns the ideogenesis (choice and development of lexical notion) rather than the morphogenesis (development of the grammatical notion). The development of the event image is viewed as comprising five successive stages at the pre-chronogenetic level, each of them rooted in perception.

At the first stage the perceiving subject and the perceived event are separated in consciousness which results in the realisation of the cognitive feature 'Occurrence'. This feature is presumed to have a linguistic representation of the Inherent lexical aspect, i.e. the basic meaning which unites words of different parts of speech (e.g. *shoot*, *shot*) and serves to lexically identify the same kind of event.

The second stage comprises the realisation of staticity and movement, or change. The cognitive features Stasis and Kinesis of the event correspond to the linguistic categories of Stative and Non-Stative lexical aspects.

The third stage is based on the preceding notion of movement, developing the realisation of two kinds of movement - determinate, proceeding in a definite direction and thus

bound to reach its end-point, and indeterminate, unordered movement. The linguistic exponents of these cognitive notions are the determinate and Indeterminate lexical aspects.

The fourth stage is based on the notion of orderly movement which is goal oriented and proceeds from a beginning through a unidirectional process to an end. The binary tensor provides the remaining two features of this level - punctual and repetitive occurrence. These cognitive realizations of the manner of occurrence correspond to the Punctual and Iterative lexical aspects.

The final stage involves the separation of the event and its subject, or pivot, which allows for the subject to be viewed either externally, corresponding to the Perfective lexical aspect, or internally, corresponding to the Imperfective lexical aspect. The hierarchical system of lexical aspects is subsequently provided.

The second part of the thesis is an application of the proposed theoretical constructs for the analysis of the aspectual subsystems of Russian.

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LIST OF ABBREVIATIONS

ACC	Accusative
AOR	aurist
DAT	Dative
GEN	Genitive
GTA	Guillaumeau Tense and Aspect Theory
imp	imperfective
IMPER	imperative
IMPT	imperfect
INF	infinitive
INST	Instrumental
LOC	Locative
MASC	masculine
NOM	Nominative
OCS	Old Church Slavie
PART	participle
PERF	perfect
PIE	Proto-Indo-European
PL	plural
PREP	Prepositional

PRES	present
prf	perfective
Rus	Russian
SG	singular
SUFF	suffix

Introduction.

The main objective of this thesis is to take a new look at lexical aspects, or Aktionsarten, and to provide a systematic analysis in accordance with the theory of aspect which is based on the teaching of Gustave Guillaume (1965; 1984) and his followers (Valin 1965, 1975; Hirtle 1967, 1975; Hewson 1997; Hewson & Bubenik 1997). The principles of Guillaumean linguistics are applied to the analysis of Aktionsarten in order to reveal underlying cognitive categories and their systemic relations to different kinds of lexical aspect. A theoretically constructed system of hierarchically organized and structured lexical aspects is then applied to the analysis of Russian verbs which are shown to comprise several distinct semantic and morphological classes corresponding to different cognitive stages of the development of the event-image.

The main reasons that stood behind the writing of this thesis are the following. The category of aspect remains among the most controversial in linguistics. Comrie (1976) provides a comprehensive cross linguistic description of various aspectual distinctions which may be morphologized in a regular verbal paradigm representing the category of aspect proper, or may constitute a separate class of aspectual distinctions manifest in derivational morphology or semantics of individual verbs. What is a regular morphological aspect in one language, e.g. imperfective in Russian, may be an aspectual distinction in another, e.g. in English, and be absent altogether in yet another, e.g. Chuvash. The aspectual systems of Slavic languages are among the most extensively described and are almost universally believed to comprise the opposition of perfective versus imperfective aspect. There exist a number of phenomena in Slavic verbal systems, though, which can not be explained in terms

of the perfective/ imperfective opposition. Among those phenomena are unpaired perfectives and imperfectives, multiple relationships and aspectual trios (Forsyth 1970:43-48), the semelfactive and iterative suffixes, and inconsistencies in the semantic patterns of presumably perfectivising preverbs, semantic differences between aspectual pairs and neutralisation of the aspectual contrast in certain cases. Forsyth (1970:29-30) remarks that the existence of perfectives with a variety of nuances, along with imperfectives expressing habitual repetition, at one time led linguists to conclude that Russian had more than two aspects, e.g. the verb *shout* has the following forms:

- (1) a. кричать /kričat'/ (imperfective) 'shout'
- b. крикнуть /kriknut'/ (semelfactive) 'shout, give a cry'
- c. крикивать /krikiivat'/ (iterative) 'shout habitually or intermittently'
- d. покричать /pokričat'/ (perfective) 'shout for a while'
- e. покрикивать /pokrikiivat'/ (secondary imperfective/iterative) 'keep on shouting
now and again'

Numerous irregularities and a lexico-derivational rather than inflexional way of creating aspectual pairs made some scholars conclude that Slavic aspects are somewhat idiosyncratic (Dahl 1985:27). For that reason it is not surprising that aspectual systems similar to Slavic can hardly be found in any other Indo-European language nor, for that matter, in any other typologically different language except for geographically neighbouring

Georgian and Hungarian (Dahl 1985:86-87). But even within the Slavic family verbal representations are far from being identical. Though in some major points the Russian verbal system is similar to the systems of other Slavic languages, there are numerous differences both in the meaning and usage of individual verbs and the two grammatical aspects which are by no means a matter of detail (Maslov 1985:31) as they show a systematic character and a considerably high frequency of occurrence (Stunová 1993:1).

The verbal systems of typologically different languages show a remarkable variety of other categories which may be expressed by finite forms. These are often described, without strict methodological foundation, as tenses. For example, Zakiev (1966:146-148) proposes the system of indicative tense forms in his native Tatar language, as follows:

- | | | | |
|-----|--------------------------|-------------------------------------|---------------------------|
| (2) | a. Present | барам /baram/ | 'I go/am going' |
| | b. Past Categorical | бардым /bardym/ | 'I went/have gone' |
| | c. Past Incomplete | бара идем /bara idem/ | 'I went/I was going' |
| | d. Remote Past | барган идем /bargan idem/ | 'I went (long ago)' |
| | e. Remote Past Iterative | бара торган идем /bara torgan idem/ | 'I used to go (long ago)' |
| | f. Future in the Past | барачак идем /baračak idem/ | 'I was (about) to go' |
| | g. Future Categorical | барачакмын /baračakmyn/ | 'I shall go' |
| | h. Future Indefinite | барырмын /baryrmyn/ | 'I will (probably) go' |

This makes up a system of one present (2a), four past (2b-e) and three future tenses (2f-h), of which four tenses are analytical, with the personal inflexion carried by the defective

auxiliary verb *i-* 'be'. In contrast, Poppe suggests a system of three simple (past, conditional and imperative) (Poppe 1968:59-64), and a number of compound tenses consisting of a form of an auxiliary preceded by the main verb in either its finite form or in the form of a verbal noun, a participle or a gerund (Poppe 1968:102-103).

Just as the case with Slavic languages, other Turkic languages related to Tatar to the point of mutual intelligibility, have a significant non-overlapping of the categories of the verbal finite forms, cf. Uzbek indicative forms from Reshetov (1966:349-351) below.

Present-Future tense:

- (3) келаман /kelaman/ 'I (will) come'

Progressive tense, which has five separate forms not identical semantically:

- (4) a. ишляпман /iřlayapman/ 'I am working (at this particular moment)'
b. келаятирман /kelayotirman/ 'I am coming (at this particular moment)'
c. турирман /turibman/ 'I am standing' (for four verbs of state турмок/turmoq/ 'stand', ўтирмак/otirmoq/ 'sit', юрмак/yurmoq/ 'walk', ётмок/yotmoq/ 'lie')
d. ишлаб ўтирирман /iřlab otiribman/ 'I am working' (lit. 'working sitting')
e. кела ётирман /kela yotibman/ 'I am coming (at this particular moment)'

Past Definite tense with two forms:

- (5) a. ишладим /iřladim/ 'I worked'
b. ишлаганман /iřlagan man/ 'I (had) worked'

Past Narrative with four different forms:

- (6) a. ишлаган эдим /iřlagan edim/ 'I worked, used to work'
b. ишлабман /iřlabman/ 'I worked'
c. ишлаб эдим /iřlab edim/ 'I worked (past indefinite)'
d. ишлар эдим /iřlar edim/ 'I worked/was working'

Future suppositive (7a) and Future definite (7b), a rarely used form:

- (7) a. ишларман /iʃlarman/ 'I will (probably, evidently) work'
 b. келажакман /kelazakman/ 'I shall come'

Descriptions like the one above are very characteristic of manuals and academic works devoted to Turkic languages (Reziukov 1959; Krueger 1961; Andreev 1966). Besides a somewhat random listing of different verbal forms, presumably tenses, there is considerable controversy about their number. There is also a lack of uniform terminology for them, even in the case of relatively well described languages, such as Turkish and Tatar, compare, for example, Zakijev's terms in (2) to those used by Poppe (1968). The verbal morphology of Turkic languages is often presented as an unordered and unstructured set of different tenses which do not seem to be interrelated or to make up a coherent system or systems with certain subsystems; cf., for example, the number of tense forms and the terminology used by Reshetov (3-7) and by Kononov (1960) for Uzbek, or the description of Turkish indicative forms in Lewis 1967 and Underhill 1976.

The diversity of verbal representations in different languages does not prevent people from learning and understanding other languages, of which massively bilingual areas such as New Brunswick and Quebec in Canada or Tatarstan and Chuvashia in Russia are among notably salient examples. The very ability of people to learn typologically different languages proves that human consciousness operates in a considerably uniform way, and that the mental foundations of language structures must be similar though they may have different surface

representations. This is the first fundamental theoretical principle which is accepted in this thesis.

The realisation of this principle stems from the teaching of Meshchaninov (1945) who suggested the existence of the so-called notional, or conceptual categories (понятийные категории) which may be expressed by a number of different language means at different levels. This idea can be illustrated by the following example. English may be said to have a conceptual, or cognitive category of the modality of supposition. This category does not have a uniform means of expression, such as suppositional mood, for example. However, it may be represented by purely phonetic means (rising intonation) alone or in combination with an interjection (8a); by a lexeme with a basically suppositional meaning, such as *maybe*, *probably* etc. (8b); by modal verbs (8c); by a syntactic structure with the verb expressing supposition in the main clause (8d), and, possibly, some other ways.

- (8) a. Pat did it, *eh?*
 b. *Perhaps* Pat did it.
 c. Pat *could* have done it.
 d. I *guess* Pat did it.

The category of supposition also seems to be gradual, as it is possible to express various degrees of it, as in (9). The latter example was a response of a native speaker of English to my question *Can 'Scarlett' be a family name*. As it turned out to be, the speaker had never heard such a family name before, and this made her express her supposition using

nearly all the possible means:

(9) Well, ... I suppose, ... probably, it could.

Modality of supposition, consequently, does not have a uniform morphological means of expression in English but it does exist in the minds of speakers of English and will allow them to easily grasp and use morphological means of representing supposition, such as the verbal category of the potential mood.

Conceptual, or cognitive categories are studied by functional grammar and are described as forming functional-semantic fields (Admoni 1949; Bondarko 1983), or as categories of otherwise structured systems (Vet 1986; Siewierska 1991) with different levels and strict hierarchy. The idea of functional grammar that language categories represent strictly organized structured systems with inner hierarchy is another theoretical principle accepted in this thesis.

A third principle underlying this research is Hewson's (1997) idea that human cognition and language activity involve three basic processes (memory, perception and imagination) which mold the categories manifest in language.

A fourth principle is that of binary contrast expressed in Guillaume's (1984:118-119) radical binary tensor, a basic mechanism for linguistic operations. In the thesis this mechanism is presumed to be the major mechanism underlying the system of cognitive categories that determine both lexical and grammatical aspectual distinctions of verbs.

The choice of lexical aspects, or Aktionsarten, for investigation in this thesis is determined by several factors. Guillaumean linguistics has made major advances in connecting some aspectual phenomena to certain cognitive images and in providing a uniform and comprehensive way of describing systems of aspect and tense in different languages (Hirtle 1967; Hewson & Bubenik 1997). Nevertheless, there remain a considerable number of phenomena generally listed under the heading of Aktionsarten which seem to be properties of verbs as lexical units, and are consequently often treated as unpredictable and arbitrary. The existence of verbal subclasses, for example, Russian iterative, semelfactive verbs or determinate and indeterminate verbs of motion, however, suggests that lexical aspects are also stratified in a strict way and could have similar categories and subcategories as the regular morphological aspects. The problem then arises as to what cognitive categories underlie lexical aspectual distinctions, and whether it is possible to provide a finite inventory of theoretically possible Aktionsarten in any language as reflexes of these universal cognitive categories. A search for solutions to these problems constitutes one of the main thrusts of the present study.

The thesis is organized in the following way. Chapter One introduces the basic notions and principles in the Guillaumean approach to the problems of tense and aspect. This approach is the theoretical basis and methodological mainframe of this work.

Chapter Two deals with some problematic topics in the (still developing) Guillaumean theory of aspect, particularly pertaining to those stages of cognitive activity which have not yet been sufficiently covered by the authors working within that paradigm. Chapter Two also

outlines the main problems concerning specifically the notion of Aktionsarten.

Chapter Three attempts to expand Guillaumean theory of aspect into the realm of lexicon and to determine cognitive images which give rise to aspectual distinctions on the lexical level, and to correlate them with certain linguistic means of representation. It also describes a possible uniform inventory and structure of aspectual subsystems which presumably exist in most languages and have a linguistic representation. This description begins with the lowest level of cognitive development of a cognitive image of the event and progresses to further, or higher stages. Lexical aspects are correlated with the cognitive stages of event-image development so that a hierarchically organized system of lexical aspects can be proposed. In Guillaumean terms this may be described as a chronogenesis (a staged development) of the act of representation, or ideogenesis, which establishes a verbal lexeme appropriate to the speaker's expressive need (*visée de discourse* or expressive goal).

The remaining chapters represent a sample application of the theoretical constructs advanced in Chapter Three in the analysis of the lexical aspects of Russian. The analysis begins with a brief historical overview of the aspectual system of Old Church Slavic (Chapter Four), and an investigation of the meanings and functions of prefixes in modern Russian (Chapter Five). In the final chapter, Chapter Six, the systems of Russian Aktionsarten are presented. The description reviews the theoretical description of Chapter Three, i.e. it begins with the larger and more universal categories of the perfective and imperfective which represent the highest cognitive stage in the event-image development prior to chronogenesis, and traces the theoretical levels of lexical aspects down to the first level which corresponds

to the first stage of event-image development.

The last Chapter contains the Conclusions drawn from the research.

A few notes on notations. Examples from different languages except Old Church Slavic are given in the original orthography and are supplied with English glosses and transliterations. In the transliterations the following conventions were accepted. The letter *j* is used to denote the palatal glide except in Russian examples after a consonant before a back vowel. In the latter case the letter *j* denotes the phonemic palatalization of the preceding consonants. The letter *y* in transliterations corresponds to the Russian letter *ѣ* and in the examples from Turkic languages it denotes the back counterpart of the high front sound /i/. In transliterating Chuvash examples three original letters (*ç* for the palatal sibilant, *ă* and *ě* for the back and front reduced vowels) are preserved following an established tradition in transliterating Chuvash words (see, e.g., Dobrovolsky 1992). Old Church Slavic examples are all given in transliteration except for the two reduced sounds which are rendered by the Cyrillic letters *ѣ* and *ѥ* following the example of Schuyt (1990).

Chapter One.

The Guillaumean Approach to Tense and Aspect (GTA).

1.1. Underlying Principles.

Before giving an outline of how aspect is treated by Guillaumeans, it is necessary to provide a few introductory notes on the basic notions of Guillaumean theory. It follows Saussure's fundamental distinction between *langue* (tongue) and *parole* (discourse) (Saussure 1989[1916]:52) though the relationship between the two notions is viewed differently (Guillaume 1984:35-37). Tongue is a system of integrated systems (e.g., the system of noun and the system of verb) each of which has its own unity (Guillaume 1984:51). Tongue can only be observed in discourse which thus serves as the only observable part of language. The principle idea of Guillaume can be summarised in the following statement: "everything in language is a process or a possibility thereof" (Wickens 1992:8). Each act of language involves several mental operations, or processes, which necessarily takes time, however short it may be. These operations, or movements of thought, can be represented by an arrow that represents a vector. "As movement develops, the mind can intercept it at some appropriate point, whose position will necessarily depend on the amount of time allowed to elapse from the outset of the movement. Similarly, the result obtained depends on the point at which the interception occurs" (Guillaume 1984:163). The major mechanism that gives the mind its power is the *radical binary tensor* shown in Diagram 1 of Guillaume 1984:118. It reflects two basic operations which involve the double movement of thought, first a narrowing movement (particularisation), then widening (generalisation) (Guillaume 1984:53). Guillaume first applied the mechanism in order to account for the system

of the article in French. Later he realised that the mechanism had a considerable explanatory potential which can be applied to other theoretical notions. According to Hirtle (1984:XVI), “Guillaume postulated that this all-embracing mechanism reflects one of the basic capacities of human thought: the ability to generalise and to particularise”.

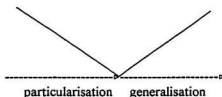


Diagram 1.

The explanatory power of this mechanism was subsequently employed for the description of the systems of article (Hewson 1972) and number (Hirtle 1992; Wickens 1992).

The present thesis is an attempt to apply the notions of particularisation and generalisation to explain some aspectual properties.

Alongside the above ideas, the Guillaumean theory of tense and aspect, which will be referred to as GTA, rests on several fundamental principles: (1) the idea of stratified organization of language systems and subsystems; (2) the three-fold character of human consciousness and cognition; (3) the double nature of time perception and representation; and (4) Guillaume's notion of chronogenesis. In order to understand the terms and concepts of GTA and the way they are applied in this research, it is necessary to provide at least a brief overview of these principles.

1.1.1 Stratified structures.

Hewson (1997:2) argues that both tense and aspect are complex mental constructions, “stratified structures in the sense of Jakobson who recognized that in certain linguistic systems some elements were acquired only after others have been acquired, and that these later acquisitions were the first to disappear in aphasia” (Hewson 1997:2). Jakobson’s (1990:299) view is that every phonological system is a stratified structure. The same conclusion holds true for syntactic and morphological structures, as was demonstrated in an experimental project of Spivak (1989). Earlier this century Gustave Guillaume (1965[1929]) applied a similar approach in representing the moods of the French verbal system as a stratified system of three operational and sequential stages, the indicative mood being the last level of representation that could only be achieved after the representations of the two previous stages, namely, the infinitive and subjunctive moods, were achieved (Hewson 1997:2). Guillaume called this staged development of a complex time image “chronogenesis”, which is a key concept of GTA and is discussed in section 1.1.4 below.

1.1.2 Three-fold character of consciousness and cognition.

Our representation of the world by means of language is not a mirror image but is mediated and transformed by our perception: “we do not represent the world as it is, we represent the world the way we perceive it” (Hewson 1997:2). *Perception*, or immediate sensory experience, is not an independent process which falls into oblivion and disappears without a trace upon its completion. Perceptive images are subconsciously recorded by *memory*, where they are stored more or less permanently in an intricately organized way which also allows us to project them

into non-existing anticipatory perceptions, or *imagination*. These three faculties - memory, sensory experience (perception) and imagination - are the major constituents of consciousness (Hewson 1997:3) and they enable us to behave in an orderly and goal-oriented way.

Our very existence and mental activity, consequently, are related to three important moments:

- i. the immediate past (the omega field) recorded in the memory;
- ii. the moment of immediate experience being recorded by the senses (α_0/ω_0);
- iii. the immediate future (the alpha field) visualised in the imagination (Hewson 1997:3).

Hewson uses the analogy of the film moving through a cine camera and compares the memory to those frames that have been exposed, and imagination to those frames which are still unexposed. The moment of immediate experience may be compared to the frame in the process of being exposed to light in the chamber of the camera (Hewson 1997:3). This comparison serves to illustrate one of the most momentous concepts of GTA - that of relativity of time perception and representation.

1.1.3 Relativity of time perception and representation.

The flow of time can be perceived and represented in two ways. Using an analogy of a flowing river, in one case the observer (recipient) is on the bank standing still while the river is seen to be in movement. In the second case the observer, floating downstream on the surface of the river, perceives the bank as in movement. This analogy illustrates Guillaume's cognitive contrast of "*le temps qui marche dans l'esprit*" versus "*l'esprit qui marche dans le temps*",

or, in Hirtle's (1975:16) and Hewson's (1997:4) terms, *Ascending* versus *Descending* time. *Descending Time* records our sensory experience regardless of our will whereas *Ascending Time* is required for conative or imaginative mental activity (Guillaume 1964:195, Hewson 1997:4). In other words, Descending Time puts the observer with his face looking to the past, i.e. Descending Time evokes the impression of "falling away into the past", "moving back into the past" (Hirtle 1975:16).

In the case of Ascending Time the observer is looking into the future so that the most recent experience is *in front of* an event or experience which will follow, i.e. Ascending Time implies the opposite movement toward time which is not yet actualised (Hirtle 1975:16).

In the downward flow of perceived time (Descending Time) "the moment of consciousness, when recorded in the memory, becomes moment ω_1 , then ω_2 , then ω_3 , and so on as the memory of the experience fades into the past" (Hewson 1997:6) which may be graphically represented with a retrospective arrow:



Figure 1. Descending Time

"In the progression of the event represented in ascending time the initial moment α_1 is followed by α_2 , then α_3 , as the projected event proceeds towards its conclusion" (Hewson 1997:6) which may be represented by a prospective arrow (Figure 2):



Figure 2. Ascending Time.

where X represents the point of orientation, i.e. the consciousness of the individual (Hewson 1997:6).

1.1.4 Chronogenesis.

The three cognitive mechanisms (memory, perception and imagination) may be illustrated by linguistic categories. The three forms which correspond most closely to our cognitive experience, are

- i. the infinitive (*to sing*) in which the event is represented as a complete whole conceived by imagination;
- ii. the present participle *singing* in which the event is represented as the kind of activity that takes place in immediate sensory experience;
- iii. the past participle *sung* which represents the event as just completed, recorded in the immediate memory (Hirtle 1975:20; Hewson 1997:5).

1.1.4.1 The first stage of chronogenesis.

Hewson points out that the three representations outlined in 1.1.4 “are the fundamental, or primitive delineations of verbal activity in English on which the rest of the verb system is built” (Hewson 1997:5) and are the first elements learnt by the English-speaking child. These three different contrastive elements form the verbal subsystem at the first stage of chronogenesis in English, the stage which Guillaume called *nominal*, or *quasi-nominal* mood (Guillaume 1964:186; Hirtle 1975:16; Hewson 1997:6). Incorporating the retrospective and prospective

arrows into one picture can give us a graphic representation of the first chronogenetic stage (Figure 3) where the past participle *sung* is a representation of a memorial event, the infinitive *(to) sing* is a representation of an event in imagination, and the present participle *singing* is a representation of the stage of sensory experience (Hewson 1997:6).

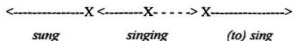


Figure 3. The first chronogenetic stage.

According to Hewson, “these three fundamental representations are the basis for the development of the system of tense, aspect, mood and voice in the verbal system of English” (Hewson 1997:6).

1.1.4.2 The second stage of chronogenesis: Universe Time.

The verbal representations at the first level of chronogenesis are only relevant to the internal time, to the time of mental functioning, according to Hewson who underscores this point. Very soon a child learns “that there is necessarily time outside the mind, just as there is space outside the body” (Hewson 1997:7). It becomes possible to make an extrapolation from mental time and to represent the whole of universe time called by Guillaume *le temps expliqué*, the time that contains the event as opposed to *le temps impliqué*, the time contained by the event (Hewson 1997:7). Hewson replaces these French terms by the more simple and convenient terms *Universe Time* and *Event Time* originally proposed by Valin (1975) (Hewson 1997:7).

Universe Time may be represented as a vast present running from an infinity in the past

to an infinity in the future. This representation creates the second level in the development of the verbal time-image, or the second stage of chronogenesis which is typically used for the representation of the subjunctive (Hewson 1997:7).

According to Hewson, some languages choose the representation of Universe Time as descending, as in Greek or Slavic languages as illustrated by Figure 4.

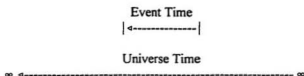


Figure 4. Descending Universe Time.

Other languages represent Universe Time as ascending : “this is the situation in English where the subjunctive forms resemble those of the infinitive, and the normal past tense of the indicative is a preterit, not an imperfect, and the non-past tense also represents events as complete, so that the simple non-past *he walks through the door* contrasts with the progressive form of the same verb *he is walking through the door*” (Hewson 1997:7-8). This case can be illustrated by Figure 5 which shows two mental realisations of the physical notion of time. One of them is Event Time and the other is Universe Time.

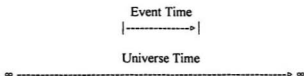


Figure 5. Ascending Universe Time.

Most Indo-European languages, according to Hewson (1997:8), have a binary system of tense in the indicative, past versus non-past, in either Descending Time (e.g.

Greek, Slavic) or Ascending Time (e.g. Hittite, Germanic). In such binary systems a future representation is constructed by means of the aspect system.

Some languages, however, such as Latin and most of the Romance languages, have representations in both Ascending and Descending Time. In the indicative the Romance languages have two past tenses - preterit (in Ascending Time) and imperfect (in Descending Time) as represented by Guillaume (1964:195), and in the subjunctive two contrastive forms, a so-called "present" in Ascending Time and a so-called "past" in Descending Time.

Verbal forms produced at the second level of chronogenesis represent events in Universe Time without any precise localisation. This enables the usage of the subjunctive forms in subordinate clauses, or in representations of a possible event that could occur anywhere in Universe Time (Hewson 1997:8).

It should be noted at this point that Guillaumean linguistics does not have a canonical set of dogmatized ideas. Rather, Guillaume's pioneering discoveries of psychological mechanisms underlying linguistic representations and his methodology have been open to criticism, further elaboration and re-interpretation. Not surprisingly, in the past half a century scholars working within this paradigm came up with numerous ideas specifying, extending or developing Guillaume's basic notions. These ideas, of course, are not always identical. For example, Hirtle (1975:15ff) collapses Event Time and Universe Time and holds the view that in English "the infinitive, the present participle and the past participle... evoke no image of universe time divided into time spheres" (Hirtle 1975:16) and that the quasi nominal mood has representations only in Descending Time (Hirtle 1975:18). Hirtle also (1975:18) extends the term "tense" to the forms contained

in all three moods and calls the infinitive and the participles “tenses”. Hewson (1997) reserves “tense” for the forms of the subjunctive and indicative mood and refers to the infinitive and participles at the nominal level as “quasi-nominals”. In the cases of these and similar discrepancies and differences in matter of detail this thesis follows the theoretical concepts adopted in Hewson 1997.

1.1.4.3 The third stage of chronogenesis: the Indicative.

At the final level in the development of the time-image the so-called indicative forms are created which ensure a precise localisation of the event in time. This is done by a representation of consciousness which creates a division line, a watershed within Universe Time between two distinctive time spheres, separating past time (memorial time) from non-past (non-memorial time). This is illustrated by Figure 6:

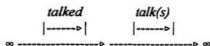


Figure 6. Time spheres in English.

Potentially, languages can make further divisions of Universe Time locating an event relative to the perceptive stage. Hewson gives the example of Latin (Figure 7) where “the present is a platform from which both past and future may be surveyed” (Hewson 1997:9).

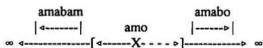


Figure 7. Time spheres in Latin.

It is, of course, possible to have many more morphological tenses than just past and non-past (cf. the notion *remoteness* and systems with at least seven past tenses in Dahl 1985:120-123). For example Haya, a Bantu language, has a distinct set of morphological verbal forms which locate different tense and aspectual forms in the following six segments of Universe Time (Hewson, Nurse, Muzale - personal communication) (Figure 8). The verbal forms in Figure 8 are the unmarked aspect of the verb *ku-gur-a* 'to buy' in the first person plural. The tense marking morphemes which are italicized mark the same tenses in all the aspects throughout the indicative paradigm in that language¹.

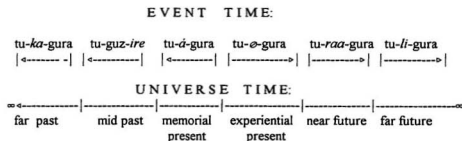


Figure 8. Time spheres in Haya.

1.1.4.4 Summary of chronogenesis.

It is important to emphasize that *tense* is a category which locates the event within Universe Time, and can only be described in terms of a single tense representing the vast present (as in the English subjunctive *he go*), or in terms of past/non-past with additional fields, or segments. The non-past can be subdivided into present and future while the past can be subdivided into

¹The tense markers immediately follow the subject marker (*tu-*) except for the mid past tense where the marker *-ire* is identical to the marker of the perfect aspect and follows the verb root.

near past, mid past, far (remote) past etc. The present can be further subdivided into memorial present and experiential (perceived) present, while the future can undergo a subdivision into near future, mid future and far (remote) future.

It is evident that such notions as *progressive*, *perfect*, *perfective*, *categorical*, *definite*, *suppositive*, *narrative*, etc. are not applicable to the notion *tense*. All these terms belong to the domain of modality or aspect. Aspect, as we shall see, deals with Event Time and the localisation of the subject at various positions within the event, or before or after the event.

The stages subsumed under the term Chronogenesis are supposedly universal. However, individual languages may go through certain changes which may lead to the elimination of the indicative tenses of Stage Three (Hewson 1997:10) resulting in the wider exploitation of aspectual forms, as in North Slavic languages. While Guillaume's original idea of chronogenesis is based on three stages, Hewson (1997:11) argues that there may be more complex systems with four stages, or less complex with two stages.

A generalised graphic representation of a typical three-stage chronogenesis at its final stage is shown in Diagram 2, reproduced from Hirtle 1975:14-15.

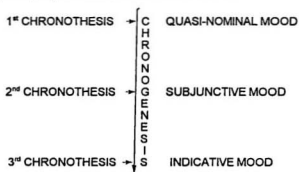


Diagram 2.

Guillaume's original term *chronothesis* refers to the image resulting from the interceptions at the different points of the mental operation producing a time-image, i.e. the operation of chronogenesis. These chronotheses correspond to the chronogenetic levels described above.

1.2 Aspect. Event Time.

The study of aspect has produced an abundance of literature in which aspect is treated in a number of ways. Some scholars analyse both synthetic and analytic forms of aspect while others limit aspect to synthetic forms or to the description of Aktionsart in Slavic (Hewson 1997:11). GTA basically follows Guillaumean guidelines in attributing aspect to Event Time as can be seen in the following remarks by Guillaume's disciple Valin (1975:133) reproduced in Hewson (1997:11-12):

This common feature by which one can always, despite different states of definition, recognise grammatical aspect, is, here as elsewhere, the setting up of a distinction involving, not *the time that contains the event*, but *the time that is contained in the event*. This opposition between a universe time which *contains* and an event time which is *contained* - an opposition which corresponds to a difference not of nature (time is always time), but of position (time in the position of container and time in the positions of content) - is the key to all problems concerning grammatical aspect [translated by John Hewson].

If tense is in essence the process of locating the event relative to Universe Time, then the essence of aspect is localising the subject of the event relative to Event Time. If we indicate Event Time by a dotted line similar to prospective and retrospective arrows (Fig.1 and 2), then the subject of the event (i.e., the grammatical subject of the verb) can occupy one of the five positions marked by capital letters (Hewson 1997:13) in Figure 9, namely the three internal

positions and the two external positions.

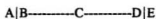


Figure 9. Positions of the subject of the event.

1.2.1 Prospective Aspect.

Point A in Figure 9 represents the subject in the position *before* the event. It corresponds to what Hewson (1997:12) calls Prospective Aspect as in English *will speak*:



Figure 10. Prospective Aspect.

The diagram in Figure 10 shows an event as a whole, with its beginning and end represented by vertical bars while the subject is placed outside the event prior to its beginning (for more information on Prospective Aspect see a sample GTA analysis of English in section 1.3). In the example above, *will* is a non-past tense marker and the infinitive advances the action expressed by the verb to a later time, namely the future. Paradigmatically, the non-past tense marker *will* is opposed to the past tense marker *would* in the same aspect. Thus it appears that the auxiliary of these verbal constructions carries the function of denoting tense with aspectual meaning rendered by the main verb.

1.2.2 Inceptive Aspect.

The position of the subject at point B in Figure 9 illustrates Inceptive Aspect when the subject is located inside the event at its very beginning. Morphological Inceptive Aspect is

not very common in Indo-European languages. However, it is clearly manifest in some verbs with perfectivising preverbs in Slavic languages. For example, the preverb *za-* turns imperfective verbs into perfective and also adds the shade of meaning 'to start, to set out', as in Russian examples 10 (b and d) :

- (10) a. бегать /*begat'*/ 'to run, to be running around' - Imperfective
 b. забегать /*zabegat'*/ 'to start running (around)' - Perfective
 c. петь /*pet'*/ 'to sing' - Imperfective
 d. запеть /*zapat'*/ 'to start (burst out) singing' - Perfective

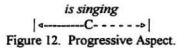
What is traditionally called Aktionsart (lexical aspect) in the above examples clearly represents the subject at the very beginning of the event. In the absence of systemic Inceptive aspects marked by suffixation, I shall use the Russian derived verb (10d) with the lexical Inceptive Aktionsart as an example of the subject in the position at the very beginning of the event in Figure 11:

zapat'
 |B-----|

Figure 11. Inceptive Aspect.

1.2.3 Progressive Aspect.

Point C in Figure 9 represents Progressive Aspect. In this case, the subject is located between the beginning and the end of the event with some part of it normally accomplished and the rest to be completed, as in Figure 12:



As might be expected, the main verb in this aspect in English takes the form of the present participle (recall from 1.1.4.1 that the present participle corresponds to the stage of sensory experience, at the first chronogenetic level, as located on the threshold between memory and imagination, and apparently this primary *Gestalt* participates in all subsequent developments which involve present participles). In the English Progressive the tense is indicated by the auxiliary, while the aspectual meaning, as in the case of Prospective Aspect, is indicated by the form of the main verb.

Some languages may lack a syntactico-morphological Progressive Aspect. The idea of the subject inside the event, nevertheless, can be expressed either by a different aspect (e.g., Imperfective) or by various periphrastic (lexico-syntactical) means, as in the German example below:

- (11) Sie war beim Essen 'She was eating'
She was at-DAT. eat-INF.

Periphrastic expression of the Progressive, according to Dahl (1985:93), seems to be predominant cross-linguistically.

1.2.4 Perfective Aspect.

Point D in Figure 9 represents the subject in the position at the end of the event (Figure 13).

popit = 'to have a drink'
 |-----D|

Figure 13. Perfective Aspect.

Perfective Aspect is absent in English but it is believed to be a regular morphological aspect in Slavic languages, and is found also in other languages (cf. the Greek aorist). Slavic verbs have a lexical-morphological perfective aspect, i.e. the aspectual meaning is part of the general semantics of the verb, such as the Russian *popit* 'to drink up, to have a drink'. In Ancient Greek, however, the aorist is a regular morphological (paradigmatic) category commonly marked by means of suffixation. In English the Aktionsart meanings of the perfective aspect are expressed by such phrases and verb collocations as *to drink up*, *to run into*, *to turn up* (Hewson 1997:14-15) which also have a lexical meaning representing the complete event. In Russian, this aspect is used to denote a completed event in the past tense form, and to denote the future in the non-past tense whereas a reference to the present moment is impossible with such forms. English verbs with perfective meaning also seem to have this property: their usage in the past tense seems natural (12 a and b) while in the present their usage is not quite felicitous as in (12c) and (12d) unless the latter examples are used in stage directions, or as the so-called "historic present".

- (12) a. Pat drank up the medicine
 b. Chris finally sat down.
 c. ? Pat drinks up the medicine
 d. ? Chris finally sits down.

The absence or presence of some aspects seems to vary significantly in even related

languages. This variety, nevertheless, is accounted for by the different representations of Universe Time accepted in different languages. For now it would be enough to say that perfective and imperfective aspects are attributes of descending Universe Time, i.e are a property of languages which have a representation of Universe Time as Descending Time. English having the representation of Universe Time as ascending, consequently lacks syntactic or morphological Perfective Aspect. The representation and the interpretation of the Perfective which is accepted in this dissertation differs from the above description in several respects (see 3.2.5 and 5.2.1).

1.2.5 Retrospective Aspect.

Point E in Figure 9 places the subject in the position after the event. Reproduced in Figure 14, this situation characterises the Retrospective (traditionally called perfect, or transcendent) (Hewson 1997:13):

have spoken
|-----|E

Figure 14. Retrospective Aspect.

The difference between the Perfective and the Retrospective is not great, but as Hewson (1997:13) points out it is vital for understanding the contrasts found in different languages. He insists that the Perfect (henceforth referred to only as Retrospective) and the Perfective are quite different elements (Hewson 1997:16), an idea that often astonishes even well-oriented linguists (Dahl 1985:138). The Perfective necessarily represents the event as complete whereas the Retrospective does not do so necessarily. A phrase with the verb in the Retrospective does not necessarily imply that the event is complete and that the subject of (13) is no longer here:

- (13) I have been here for two hours.

The same context in Russian, for example, would require the use of non-past Imperfective because the Perfective (14a) in this context would mean 'I will be/stay here for two hours'. The past Perfective (14b) would not correspond to the English phrase in (13) either because it would mean the event was completed, and the appropriate usage of the past Perfective would require a different context (*tam* - 'there') as in (14c):

- (14) a. Я пробуду^{pf} здесь два часа
I be/stay-NON-PAST here two hours
'I'll stay here for two hours'
- b. ?* Я пробыл^{pf} здесь два часа
I be/stay-PAST here two hours
- c. Я пробыл там два часа
I be/stay.PAST there two hours
'I was/stayed there for two hours'

1.2.6 Immanent Aspect.

According to Hewson, simple tense forms at the third level of chronogenesis such as Greek *éluon* 'I undid' and English *I walk* are unmarked for aspect. That does not mean that they do not have any aspect. Such forms "present a fundamental representation: Performative if they were constructed in Ascending Time, and Imperfective if they are constructed in Descending Time" (Hewson 1997:10). Hewson calls this unmarked inherent aspect Immanent Aspect since it stems from the linguistic representation of time (ascending or descending) that is internal

to the representation because it is part of the orientation of the system (Hewson 1997:10). Immanent Aspect is therefore inherent in the system and for that reason it is unmarked. Its nature and peculiarities stem from the way Universe Time is represented in a particular language as either Descending or Ascending Time.

In this thesis, the Immanent is treated differently as a manifestation of the first stage of the event image development and as a representation of the Inherent lexical aspect distinctly different from the morphological Imperfective aspect (see 3.2.1 and 6.3.1).

1.3 An example of GTA analysis: tense and aspect system of English.

As has been mentioned before, English has a binary representation of tense, past versus non-past, as a property of Universe Time in the indicative (Ascending in the case of English). Except for Immanent aspect, the tense is marked on the auxiliary. The following table from Hewson (1997:12) illustrates the English system of tenses and aspects:

Aspect	Non-Past Tense	Past Tense
Performative	I speak	I spoke
Prospective	I will speak	I would speak
Progressive	I am speaking	I was speaking
Retrospective	I have spoken	I had spoken

Table 1.1. The system of tense and aspect in English.

The Performative Aspect of the forms that are unmarked for aspect stems entirely from the fact that the two tenses of English are representations in Ascending Time: their Immanent

Figures 15 and 16 allow us to show how aspectual distinctions can represent past and future from the vantage point of the present: “in the present perfect, for example, the event represented by the past participle only indicates a past event because the event is represented retrospectively from the present: any event seen retrospectively from the present must necessarily be in the past” (Hewson 1997:13). In other words, the past reference of the non-past Retrospective *have spoken* is created entirely by the fact that the subject X is represented as *outside* the event *after* it. Similarly, the future reference of the non-past Prospective *will speak* is created entirely by the fact that the subject X is represented as *outside* the event in a position *before* it.

1.3.1 Combinations of aspects.

One can not fail to notice that some frequently used English verb forms are missing from the GTA analysis. The fact is that such forms as *I have been speaking*, *I will have been speaking* etc. do not constitute separate aspects. They represent combinations of the three aspects depicted in Figures 15 and 16. This combinability reveals strict hierarchical constraints: in the sequence (15)

(15) PROSPECTIVE > RETROSPECTIVE > PROGRESSIVE

every *preceding* aspect can combine with any of the *following* as in (16a-d) but not the other way round (16 e-i):

(16) a. Prospective + Progressive	<i>will be speaking</i>
b. Prospective + Retrospective	<i>will have spoken</i>
c. Retrospective + Progressive	<i>have been speaking</i>
d. Prospective + Retrospective + Progressive	<i>will have been speaking</i>
e. * Progressive + Prospective	<i>*be will speak</i>
f. * Retrospective + Prospective	<i>*have will speak</i>
g. * Progressive + Retrospective	<i>*be having spoken</i>
h. * Retrospective + Prospective + Progressive	<i>*have will be speaking</i>
i. * Prospective + Progressive + Retrospective	<i>*will be having spoken</i>

The full significance of this hierarchy is yet to be thoroughly investigated and understood, yet even now it clearly shows the systemic character of aspectual meanings and underlying cognitive and psychological realities.

1.4. Different kinds of aspects.

Hewson (1997:13) points out that there are at least three distinct morpho-syntactic forms of aspect, namely: immanent (unmarked) aspect, analytic aspect, and synthetic aspect. There is also a fourth type, namely Aktionsart, which is distinctly lexical, not morpho-syntactic.

1.4.1 Analytic aspect.

Analytic aspect is expressed by an auxiliary, marked for tense, on which the lexical verb in an appropriate aspectual form is dependent, e.g. *I was speaking*.

1.4.2 Synthetic aspect.

Synthetic aspect is expressed by a single word which indicates both tense and aspect, the latter usually marked by affixation. Classical Latin *amavi*, *amaveram*, *amavero*, for example, are the perfect (Retrospective) forms (with -v- marking the aspect) of the corresponding Immanent forms *amo*, *amabam*, *amabo*. The difference between analytic and synthetic aspects also appears elsewhere: analytic aspects easily combine to convey a variety of aspectual meanings whereas synthetic aspects do not so easily combine.

1.4.3 Aktionsart.

Aktionsart is best known and described in Slavic languages where it is both part of the verb semantics and can be regularly created by special morphological means (suffixes and preverbs). Though these morphemes usually change the default lexical aspect (perfective or imperfective), they also, in most cases, add an extra meaning referred to as 'the way of performing an action' (*sposoby deistvia* in Russian linguistics).

However, Aktionsart is an inherent semantic feature of most, if not all, verbs in any language. As Hewson (1997:15) points out,

It follows that every verb has a certain aspect connected to its lexical representation of the event. For that reason, *to break* in its intransitive usage (*the rope broke*) has a perfective Aktionsart while *to live* has an imperfective Aktionsart. The verb *to hammer*, apparently, has an iterative Aktionsart and the verbs *to possess*, *to walk*, *to lie*, *to have* also have an imperfective Aktionsart.

It is evident from the above that Hewson treats Aktionsart as an inherent lexical property of the verbs semantically equivalent to the notions of perfectivity and imperfectivity. In the

present thesis a somewhat different approach is adopted in which Aktionsarten are treated as separate aspectual subsystems reflecting a certain pre-chronogenetic stage of perception and cognition (see Chapter Three).

1.4.4 Immanent Aspect.

The fourth kind of aspect, always unmarked, is Immanent Aspect. This is a representation created by the tense form:

Just as the lexical item brings its idiosyncratic representation (Aktionsart) to the verbal representation, the tense representations in Ascending and Descending time bring two different aspectual images to the verbal representation. The tenses that are formed in Descending Time are natural imperfectives, as in Greek and Slavic, so that the simple past and non-past tenses in these languages are Imperfectives, and these languages form contrasting Perfectives in the aspect system. In English, where the tense system is based on Ascending Time, the simple tenses represent complete events, and English has created a Progressive Aspect to form a contrasting Imperfective (Hewson 1997:16).

As stated above, the approach to Immanent Aspect accepted in this paper is somewhat different from Hewson's treatment and is discussed in Chapter Three.

1.4.5 Interaction of different kinds of aspects.

The kinds of aspect described above naturally occur at different stages of speech. Aktionsart is an inalienable part of the lexical semantics of the verb and constitutes its property in the lexicon. Synthetic aspects emerge in derivation when a regular morpheme is added to the verb root, and may be systemic, as in Latin and Greek. Analytical aspects are further developments and occur at the syntactical level. When viewed from the chronogenetic perspective, these kinds

of aspect also seem to enter the formation of verbal form through particular stages at which all of these aspects and tenses interrelate and form a unique combination. Hewson (1997:16) stipulates the following succession of the formative stages:

1. The lexical element that is to be shaped as a verb brings its own idiosyncratic Aktionsart to the verbal representation.
2. This lexical element may then be processed to produce a quasi-nominal, subjunctive, or indicative form, according to the developmental stages of the chronogenesis.
3. If the form so produced is a quasi-nominal, it will have the natural aspect that is produced at this level (e.g. perfect, progressive, prospective) and may undergo further synthetic (Latin *amare* → *amavisse*) or analytic aspect distinctions (*speaking* → *having spoken*).
4. If the form so produced is a subjunctive or indicative, it will have the natural aspect of the tense forms at these levels, either Imperfective (in Descending Time) or Performative (in Ascending Time). This form may then be subjected to further synthetic (Latin *amo* → *amavi*) or analytic aspect distinctions (*spoke* → *had spoken* → *had been speaking*).

As a particular verb may have a combination of different types and kinds of aspect in different tenses, this naturally results in a sometimes complex semantics which presents considerable difficulties for a linguistic analysis. It has been noted (1.2.1) that Prospective Aspect (*will speak*) can create a future reference which has frequently been presumed to be a tense form in English. Some specific interactions of Aktionsart and analytic aspects may lead to establishing additional meaning for certain aspects whereas they are, in fact, just a chance side effect of aspect interplay. Thus, in (17) the iterative meaning of the verb *to break* is a direct result of the combination of a perfective Aktionsart and the Progressive: once the verb initially, in the lexicon, denotes a completed action, the Progressive usage would naturally mean an open sequence of completed actions:

(17) Huge seas *were breaking* over the rocks

It seems, however, that we should not attribute the iterative meaning to the progressive aspectual forms just because some verbs may have this meaning. It is a by-product of the interaction of different kinds and types of aspect.

1.5 Problematic (discussion) topics of GTA.

As was shown in the previous section, GTA presents a reasonable, comprehensive and logical description of aspects and tenses as the process of development of complex time-images, with each stage of this cognitive development having a correspondence in language (a linguistic representation). Nevertheless, there remain several issues which are not clearly explained in GTA in its present form. They include the nature of the cognitive image that serves as the base for chronogenesis, i.e. what is it that undergoes development in the first stage of chronogenesis; the problem of hierarchical organization of different kinds of aspect, especially the interrelations between the Immanent and the Perfective and Imperfective; the question of universality of the linguistic representation of the first chronogenetic stage. These problematic issues are briefly outlined in the the following sections (1.5.1 - 1.5.3) while problems pertaining to Aktionsarten are discussed in Chapter Two.

1.5.1 The base image of chronogenesis.

The first problem concerns the essence of the entity which undergoes development at

the first stage of chronogenesis and its linguistic representation. GTA does not specify this entity. However, it can be inferred from the theory that since chronogenesis is the development of the time-image of the event, it must be the image of the event without any temporal features that enters chronogenesis. This means that chronogenesis, though being the process of time-image development, is not the first stage of overall image development. It must be preceded by some kind of a process which resulted in the formation of an event image which has no time features. It might be potentially important to find out what cognitive characteristics this time-less image of the event must have and to try to determine a linguistic correspondence, or representation of that cognitive category.

1.5.2 Stratification of aspects.

We have so far spoken of different types (Prospective, Progressive and Retrospective) and different kinds (Aktionsart, analytic, synthetic and immanent aspect). Besides these aspects, the Performative and Imperfective have been mentioned as manifestations of immanent aspect in either descending or ascending Universe Time. It has been established that the three types of analytic aspect found in English have a strict hierarchical organization, at least analytic varieties of them which can be seen in the restrictions on their combinability. Aktionsart is said to be a property of the verb as a lexical unit, i.e. it is inherently part of the lexeme and is believed to interact with the other kinds of aspect and tense semantics to create a unique meaning of a particular finite verb form.

This analysis leaves some questions unanswered especially in the case of Slavic languages

where the Imperfective is viewed as immanent aspect created in descending Universe Time whereas the Perfective finds its position at point D of Figure 9 (page 24), i.e. on par with the English aspects. That would mean that imperfectivity arises at the level of the indicative mood. In this case it is unclear why Slavic quasi-nominals, e.g., infinitives, have the same aspectual properties as the indicative forms from Aktionsart, which is confirmed or countered at the indicative level.

1.5.3 Universality of linguistic representation of chronogenesis.

This is a problem of crucial theoretical significance. Let us review the first stage of chronogenesis. Hewson has provided English forms for what was originally devised by Guillaume for French. The quasi-nominal forms in both languages seem easily represented by a past participle, a present participle and an infinitive. The question that must be answered is whether these morphological forms necessarily represent the three quasi-nominal forms, or whether it can be presumed that the past and the present participles and the infinitive are just one of the many possible linguistic representations. The answer could be found within GTA itself.

Since the formation of a time-image is a cognitive, psychological process, it should have a universal value and significance for any language and any human being. That means that regardless of the linguistic environment every child passes through similar stages of developing a mental image of an event and projecting memories in his/her imagination to create prospective vision. Yet these are *cognitive* processes and *psychological* images. Obviously, there are several ways of representing the same cognitive content by linguistic means and consequently, the infinitive

and the participles may be substituted by other linguistic forms on the first stage of chronogenesis.

Some other problems which are not sufficiently dealt with in Guillaumean linguistics are discussed in the following chapter.

Chapter Two.

Systemic grammatical and lexical aspects.

In this Chapter the implications and problematic issues of the Guillaumean approach will be considered and compared to some of the existing points of view on aspectual semantics (2.1) followed by the treatment of the category of Aktionsarten (2.2) and some considerations concerning the distinctions between lexical and grammatical aspects and their interaction (2.3).

2.1 Types of aspects in chronogenesis.

The essence of aspect was described in the previous chapter as the orientation of the subject of the event relative to the event with five possible positions. These, however, are not the only aspects that a language system might have. Hewson (1997) speaks of four different types of aspect: synthetic, analytic, immanent and lexical (*Aktionsarten*).

The first of these, *synthetic* aspect, appears at the level of the quasi-nominal mood in English and comprises the contrast between the infinitive (*to speak*) representing an imaginary event, the present participle (*speaking*), representing an event in progress, and the past participle (*spoken*), representing an event that is over, that has been completed.

This type of aspectual distinction is the basis of the system of English *analytic* aspects (Progressive, Retrospective and Prospective) when the event time of the quasi-nominals is transposed onto Ascending Universe Time and new compound forms are created by means of an auxiliary. In this case quasi-nominals combine with auxiliaries whose major function is to represent the time-sphere, i.e. the past or the non-past segment of Universe Time. The analytic aspects can combine with each other in a structured way to form combinations of aspects (*will*

have been speaking).

The third type of aspect, namely the Immanent, is the unmarked aspect inherent to a tense form. It is expressed by the simple verb form and is said to be *performative* in those tenses that are representations of Ascending Time, and *imperfective* in those tenses that are representations of Descending Time. The Immanent, consequently, is entirely dependent on the representation of Universe Time.

The fourth type of aspect, *Aktionsart*, is said to be a property of the verb in the lexicon; it is the inherent aspect associated with a certain verb in any of its forms. Thus verbs such as *hit*, *cough* are considered to be inherently or lexically perfective or semelfactive, whereas such verbs as *sleep*, *love* are imperfective, or durative.

The above description treats aspects as a structured and stratified system, as follows. The lexical aspect (*Aktionsart*) must belong to the level of ideogenesis at which a choice of a lexeme is made in order to satisfy the communicative goal (*visée de discours*) (Guillaume 1987:105; 1989:80). This lexeme with an inherent lexical aspect then enters morphogenesis in which it is shaped according to one of the three quasi-nominal patterns, i.e. goes through the first stage of the chronogenesis. Further in the morphogenesis the verb form acquires the other features which make it a finite form agreeing with the other elements of the phrase in order to satisfy the strategic goal (*visée phrastique*).

This description of the grammatical aspects provides a comprehensive and logical systemic view of the English verbal forms. However, there are some problems which are not explicitly addressed by the Guillaumean approach.

2.1.1 Problematic issues of the Guillaumean approach to aspect.

The first problem concerns the existence of the combinations of quasi-nominal semantics in such English participles and infinitives as *having spoken*, *being gone*, *to be going*, *to have been speaking*. These forms suggest that the quasi-nominal mood allows for the combinations of aspectual forms. Then the contrast between the three quasi-nominals is not as strict as it appears, since *having spoken* represents a continuing occupation of the retrospective position vis-à-vis the event. One can also debate whether the participles and infinitives are universal representations of quasi-nominals and whether they have the same reference to Event Time as in English or French, cf. the Tatar future participle which is more representative of the idea of the Prospective aspect than the Tatar infinitive:

- (18) a. бар-ыр /bar-yr/
go-SUFFIX
'going, to be going'
b. бар-ыр юл /bar-yr yul/
go-SUFF. road
'a road to follow, to walk'
c. ул бар-ыр /ul bar-yr/
He go-SUFF.
'he will (probably) go' (Zakiev 1966:146).

A second problem involves the representation of the Immanent. The English simple forms are said to be performative as they are created with the representation of Ascending Time. In this respect they differ from Slavic immanent forms which are created in Descending Time and thus are imperfective. The second existing aspect in Slavic languages, the Perfective, finds

its place on par with English analytic aspects at point D (i.e. the subject of the event being at the very end of the event). This makes the Slavic verbal system fairly asymmetrical since there is no real systemic contrast to the chronogenetic Perfective in chronogenesis. In other words, the English simple finite verb form is contrasted to three chronogenetic aspects (which are also contrasted to each other) whereas the Slavic imperfective verbs are contrasted to one aspect which is on a totally different level. The situation with the Immanent is equally complicated in Turkic languages. For example, Chuvash has only one present tense form marked with the suffix *-t-* (19a) which is opposed to the morphologically unmarked (except for number and person) future tense (19b) and to three (Andreev 1966:153) or six past tenses (Reziukov 1959:146), one of which (19c) has the same suffix in the stem as the present yet does not coincide with it in its aspectual meaning:

- (19) a. киле-т-ѐп /kiletěp/
 come-SUFF.-1SG
 'I come/will come'
- b. кил-ѐп /kilěp/
 come-1SG
 'I will come'
- c. киле-тт-ѐм /kilettěm/
 come.-SUFF.-1SG
 'I was coming/used to come'

A third problem concerns the criteria which should be used to identify lexical and grammatical aspects. Aspects may be presumed to be grammatical when they are manifest (potentially) in every verb of the language, i.e. when they are paradigmatic. In English, however,

one can not easily derive progressive forms from such verbs as *know*, *possess*, *want*, etc. On the other hand, Slavic aspects are generally presumed to be grammatical even though most verbs have an inherent (i.e. lexical) aspect and are marked for perfectivity or imperfectivity by derivational suffixes and prefixes in the lexicon. There is no formal contrast for marking aspect in the past and non-past forms of the Slavic verbs (except in Southern Slavic and literary Upper Sorbian - Shuyt 1990:36, 153-154) which could be observed in the inflexions. Besides, the existence of bi-aspectual verbs in all Slavic languages (which are not lexically marked for aspect) violates the universality of the perfective vs. imperfective contrast and resembles the situation with a limited number of English verbs which can rarely be used with certain aspects, such as *know* with the Progressive.

Yet another problem is connected with the 'iconicity' of aspectual representations. In other words, should we presume the English aspectual system as a paragon, an ultimate stage in the evolution of aspects, or is it just one of the variants in which aspectual distinctions can be represented throughout languages? It is obvious that Old English had chronogenetic quasi-nominals, i.e. participles, the gerund and the infinitive but they did not participate in creating paradigmatic aspectual distinctions the way they do now, and some of the developments, e.g., the emergence of the Progressive in the 17th century, are relatively recent.

The next problem is connected to the idea of the lexical aspects, or *Aktionsarten*. It is important to investigate the exact number and inventory of the lexical aspects and to find out if they correspond to what can be expressed by grammatical aspects throughout the paradigm, or if they include a number of related but different meanings. It is also important to establish

if lexical aspects are involved in systemic relationships and if they make up stratified structures as well.

This thesis attempts to address some of these problems and to provide solutions which would not violate the integrity of the Guillaumean description.

2.1.2 Aspect in linguistics studies.

Despite the claims “that there is no real agreement as to what aspect is anyway” (Townsend 1985:294) and “it is no wonder that the study of aspect has proven to be such a ‘dark wood’” (Binnick 1991:138), one can see several distinctly different approaches to the category of aspect in modern linguistics.

One of the most popular concept of verbal aspect stems from Reichenbach’s (1947) ideas of a time frame which comprises three basic points: the point of speech, the point of event and the point of reference. The relative location of the three points on the line of time may presumably account for the difference in aspectual forms (Dahl 1985:30). Reichenbach’s ideas, occasionally modified, are continued in a number of recent works devoted to aspect (Dahl 1985; Kipka 1990; Smith 1991).

A considerably different and equally wide-spread approach to aspect can be exemplified by Comrie’s definition: ‘aspects are different ways of viewing the internal temporal constituency of a situation’ (Comrie 1976:3) which is, in fact, very close to Guillaume’s ideas of Event Time and Universe Time, especially in Comrie’s further explanations:

Although both aspect and tense are concerned with time, they are concerned with time in very different ways. [...], one can state the difference as one between

situation-internal time (aspect) and situation-external time (tense) (Comrie 1976:5)

Unlike Reichenbach-based theories which present aspect and tense within the same dimension, Comrie's approach echoes Guillaume's notions of different dimensions. His definition is based on semantic grounds and presupposes a certain stratified structure in that the time rendered by aspects is not the same time which is pointed at by tenses. Taking into account the influence of Comrie's 1976 book, this understanding of aspect may be considered to be prevailing in modern linguistics even though it may be criticized for some minor points (e.g. in Dahl 1985:23-25).

The above definitions are based on semantic properties, and Comrie prefers to discriminate between 'aspectual distinctions' such as perfective and imperfective meanings, and 'aspects' which refer "to particular grammatical categories in individual languages that correspond in content to the semantic aspectual distinctions drawn" (Comrie 1976:7). Even though Comrie provides a comprehensive review of possible aspectual distinctions, there seems to be no way to decide what kinds of grammatical aspect can be predicted and may exist in languages. Individual languages seem to be absolutely free in grammaticalising whatever aspectual distinctions may arise. It is unclear what happens to the other aspectual distinctions, e.g. perfect and progressive in Slavic languages or perfective and imperfective in English, i.e. whether they are still to be present in the respective languages in the forms of lexical semantics, or whether they are incorporated into the grammatical aspectual contrasts.

In order to answer this question we must address the issue of *Aktionsarten* which are viewed as semantic aspectual categories represented not paradigmatically, but lexically.

2.2 Aspects and Aktionsarten.

It should be noted at the very beginning of our discussion of Aktionsarten that this category is presently used as dumpster for any derivational, lexical or any other non-paradigmatic type of aspectual distinctions. Thus whatever is not too regular in the grammar of a definite language is considered to be an Aktionsart.

The notion of Aktionsart was introduced by Streitberg (1891) as a technical term for 'aspect' (Binnick 1991:144). The term, however, later acquired different meanings, and nowadays, according to Comrie (1976:6) has at least two distinct interpretations. According to one of them, aspect is viewed as grammaticalisation of the relevant semantic distinctions, while Aktionsart represents lexicalisation of those distinctions irrespective of the way they are lexicalised, and is consequently used as a synonym of inherent, lexical meaning. The second interpretation treats Aktionsart as lexicalisation of aspectual distinctions by means of derivational morphology (Comrie 1976:7, fn.4). Besides these interpretations, Aktionsarten were also explained in terms of logical temporal structures (Woisetschlaeger 1976:20-25), lexico-semantic codings of the spacial/temporal contours of events (Holden 1990:131), resultativity (Tommola 1990:350), types of situations (Thelin 1990:5-6) and some others. The number of Aktionsarten varies from the three originally proposed by Streitberg (perfective-imperfective-iterative) (Binnick 1991:144) to eight (inceptive, absorptive, attenuative, terminative, totalising, resultative, durative, comitative) proposed by Isačenko (1962:385-418).

The controversy and confusion surrounding Aktionsarten made Comrie give up the term altogether (Comrie 1976:7). Although the analysis of the present usage of the term in

modern linguistics is worth a separate monograph, the critical survey of all existing points of view on Aktionsarten lies outside the scope of the present thesis. For that reason we will limit ourselves to examining the possible hierarchy of Aktionsarten in different languages in order to find some common semantic features which may assist us in the subsequent sample analysis of Russian aspectual subsystems.

2.2.1 Types of Aktionsarten.

A primary, rather crude classification of Aktionsarten may be composed on the basis of whether a certain Aktionsart may be grammaticalised in some languages. The perfective and imperfective aspects are grammaticalised in Slavic languages, so we may conclude that languages without this grammatical opposition may have (im)perfectivity implied by the semantic structure of a verb as a unit of the lexicon. Thus the English verbs *die*, *cough*, *leave* might be considered to have an inherent (lexical) perfective Aktionsart whereas *live*, *read*, *walk* might be presumed to have an imperfective Aktionsart. Corresponding Slavic verbs allow for all these verbs to be either perfective or imperfective, cf. the Russian verb pairs:

- (20)
- | | |
|---|---|
| a. умереть ^{pf} /umeret'/ | умирать ^{imp} /umirat'/ 'die' |
| b. покашлять ^{pf} /pokašljat'/ | кашлять ^{imp} /kašljat'/- 'cough' |
| c. покинуть ^{pf} /pokinut'/ | покидать ^{imp} /pokidat'/ 'leave, abandon' |
| d. пожить ^{pf} /požit'/ | жить ^{imp} /žit'/ 'live' |
| e. почитать ^{pf} /počitat'/ | читать ^{imp} /čitat'/ 'read' |
| f. погулять ^{pf} /poguljat'/ | гулять ^{imp} /guljat'/ 'walk' |

The second group of Aktionsarten may involve the temporal relations which are connected to different 'phases' of the event's occurrence, the way the event proceeds (hence the name 'procedural' employed by Forsyth 1970). These semantic distinctions may refer to the beginning, the middle or the end of the event. This group of Aktionsarten will then unite such notions as inchoative (becoming) as in *blush, grow up*; ingressive (beginning) as in *rise, stand up*; durative (middle) as in *sit, enjoy*; egressive, or terminative (end) as in *achieve, return, drink down*. These semantic features do not combine with each other though they can easily combine with the ideas of perfectivity or imperfectivity, as in the following Russian examples:

- (21) a. петь^{imp} /pet' / 'sing' - запеть^{perf} /zapet' / - запевать^{imp} /zapevat' / 'start singing'
 b. петь^{imp} /pet' / 'sing' - допеть^{perf} /dopet' / - допевать^{imp} /dopevat' / 'finish singing'
 c. идти^{imp} 'go' - пойти^{perf} /pojti / 'set out', 'start going' - дойти^{perf} /dojti / 'reach destination', 'arrive'

Yet another group of Aktionsarten can be united by the common feature of referring to the way an event can be perceived in terms of its sudden, single or momentary appearance, its continuation without any changes in the materiality of the event, or in a repetitive, alternating manner. Many English verbs ending with *-er* or *-le* appear to denote the latter: *giggle, chuckle, paddle, rattle, sprinkle, tickle, shuffle, whistle, chatter, glimmer, scatter, simmer, shimmer*, etc. It might be presumed that the remaining verbs (i.e. not marked with *-er* or *-le*) are very likely to denote one of the other Aktionsarten, namely, continuous, homogenous occurrence (*shine, smile, sound*) or its sudden and momentary occurrence (*hit, slam, wink, blink, bang*,

knock). We might also admit a possibility for a number of English verbs to have no clear-cut Aktionsart in reference to the occurrence of the event, in which case it is the context of a concrete utterance that would add one of the three meanings to the verb. As much as was the case with the previous group of Aktionsarten, only one of these procedurals may be present in the lexical meaning of the same verb, all three of them can also combine with the ideas of perfectivity and imperfectivity as well as with the ‘phasal’ Aktionsarten denoting the inner structure of the event, cf. the following Russian examples:

- (22) а. закашляться^{pf} /zakašljat’sja/ ‘to start coughing (repeatedly);
 б. попрыгивать^{imp} /poprygivat’/ ‘to keep on jumping up and down (repeatedly)
 в. дочитывать^{imp} /dočityvat’/ ‘to finish up reading’ (continuously)

The next group of Aktionsarten which is often described in terms of telic/atelic or terminative/non-terminative verbs unites the verbs that may have an inherent idea of something leading towards a certain limit, or end-point after which the event can not go on any longer. In this respect the English *do* is atelic, i.e. it does not imply any inner limit, or saturation of the event whereas *make* implies that the action must necessarily lead to a certain result which would constitute the inner limit of the event. The same contrast may be observed in the case of *talk* and *speak* (see Tobin 1993 for these and other pairs of English verbs semantically marked for result). It might be suggested that English verbs for the most part are not inherently marked for telicness (terminativity), so that a verb becomes telic when a certain quantity of the event is specified in the utterance. It means that the verb *sing* is atelic with indefinite objects (when

either used intransitively or with such arguments as *songs*) and is telic when used with a defined quantity of the object (*a song, five songs, for two hours*). As in the previous cases, these kinds of Aktionsarten easily combine with the Aktionsarten mentioned above.

As to the notions of absorptive, totalising, comitative, attenuative and resultative, they can be explained in terms of the combination of the Aktionsarten described above, or as a reflection of such aspectual distinctions as Perfect (for resultative) and perfective (for totalising).

We thus can propose a limited list of possible Aktionsarten, which may constitute the semantics of a separate verb as a unit of lexicon. Further on an attempt will be made to explain the emergence of these semantic features and to arrange them in a hierarchically organized system (see Chapter Three).

2.2.2 Aktionsarten and individual lexemes in individual languages.

It might appear that events as we observe them and as they are named by verbs must have a generally uniform quality. In other words, some events are necessarily punctual, others are obligatorily indiscriminate and yet others must be mandatorily iterative or terminative. This view led to the development of the inherent semantic notions of *states*, *activities*, *achievements* and *accomplishments* (Vendler 1967:101-103) which is, according to Binnick (1991:172), an elaboration of Aristotelian categories of *enérgeia* and *kinēsis* and is referred to by Thelin (1990:6) as the Aristotle-Ryle-Kenny-Vendlerian tradition. These notions are believed to have a universal character, and all verbs may fall under one of the four categories. Thelin (1990:7-8) criticises this approach and gives the following reasoning:

The difference between 'accomplishments' and 'achievements' appears to be a question rather of whether goal-oriented (or inherently terminus-bound) actions/events are understood or, in addition, with a pragmatically based connotation of conclusivity or instantaneity. The non-terminative (atelic/non-bounded) meaning of 'activities' (e.g. *swim*) is cancelled by complements introducing goal-orientation or the intentional spatial delimitation of these 'activities' (e.g. *swim to the other beach, swim a mile*).

Thelin's arguments prove that the four Vendlerian classes are not 'natural', or 'inherent lexical' aspects which verbs as units of tongue must have, as these aspects appear to be context-dependent. The inadequacy of Vendler's typology for languages other than English has been pointed out by a number of linguists who reclassify verbs into more appropriate categories to reflect the realities of individual languages: Townsend, for example, combines verbs of state and activities into one category, and verbs of accomplishments and achievement into the other (*States/Activities vs. Actions/Accomplishments*) (Townsend 1985:287); Kučera adds a lexical class of delimitives (perfectivized atelic events) for Russian and Czech along with achievements and accomplishments (Kučera 1983:174, 177). Flier (1985:52) sees the major problem in the perception of lexical aspect types as primitives and states that

Since one and the same verb can be ascribed to different classes depending on the context on the one hand, and verbs of the same class may not share the same possibilities of interaction with tense and aspect on the other, it is perhaps better to look to some other, more uniform basis for expressing the aspectual properties of verbs without scrapping Vendler's insights into situational semantics (Flier 1985:52-53).

Vendler's typology seems to be evident for some English verbs whereas for others it is obscure and can be revealed in the context. Take, for example, the English verb *to drink*. On the one hand, it is similar to the verb *to walk* and thus denotes an activity. It can be used in constructions like *to have a drink* similar to *to have a walk*. It is hard to insist on this inherent

'imperfective' lexical meaning, though, when it comes to phrases like *drink a cup of tea* in which the verb apparently represents an accomplishment, and thus has a 'perfective' lexical meaning. If we address other languages for assistance, we will discover that the unmarked form of this verb in Russian is imperfective (*pit'*), consequently, an activity similar in its semantics to something like 'to be in the process of consuming liquid', whereas in Greek the cognate unmarked verb is perfective (*πιειν*), thus denoting an achievement or an accomplishment with the semantics of 'to take a drink'. So the other languages are not of much help. It appears that the verb *to drink* in English does not denote any of the Vendler's categories in tongue, in the language system. It acquires one of the four meanings in discourse, in the linguistic or situational context of its usage.

The arbitrariness of the linguistic representation of the same event by different languages can also be shown by the following examples. The verb *cough*, according to Comrie (1976:42), is often quoted as an example of a punctual verb. The Russian equivalent *kashliat'* is an imperfective verb which apparently presupposes duration and refers to a series of single coughs. In order to express the meaning of the English verb, the suffix *-nu-* is added resulting in a verb with a punctual Aktionsart (Comrie 1976:43). Another example concerns the famous phrase *John drew a circle* as an illustration of accomplishment which conditions the impossibility of using it with adverbial preposition phrase with *for*: **John drew a circle for an hour* while admitting adverbial modifiers with *in*: *John drew a circle in an hour*. The corresponding unmarked (imperfective) Russian verb behaves in the opposite way:

- (23) a. Иван ^{imp}рисовал круг час
 Ivan draw.SG.PAST circle.ACC. hour.ACC.
 'Ivan drew/was drawing a circle for an hour'
- b. *Иван ^{imp}рисовал круг за час
 Ivan draw.SG.PAST circle.ACC. beyond hour.ACC.
 **'Ivan drew/was drawing a circle in an hour'

Example (23b) is grammatical in the habitual meaning, though: *Ivan used to draw a circle in (just) an hour.*

There may be found numerous other examples which highlight the point that practically any event may be represented cross linguistically as either a state, an activity, an accomplishment or an achievement. Compare the English verbs *to drink* and *to eat* as contrasting each other by their lexical aspect (you can *have a drink* but you can't *have an eat* - see Wierzbicka 1988:243-352). Bengali offers a verb (*khawa*)¹ which combines the meanings of both the English *to eat*, *to drink* and *to smoke*. We might speak about lexical, inherent aspects only if we can substantiate our claims by pointing to linguistic means such as affixes which can be unambiguously associated with certain semantic properties.

The arbitrariness of the verbal representations of the events by different languages prompted the use of extensive periphrastic glosses in this study instead of providing a simple translation with a single English verb.

These considerations lead to the conclusion that natural classes of verbs are language specific. This point is very important in linguistic analysis, as the researcher is apt to perceive

¹The example provided by Towhid Bin Muzaffar.

the verbs of another language with peculiar lexical aspects associated with a lexeme of his native tongue which denotes the same kind of event. These subconscious relations may potentially lead to confusion and misinterpretation. To illustrate this point, we may compare the verbs *sleep*, *love* and *go* in Russian and English. The English *love* and *sleep* are classified by Vendler as verbs of state, whereas *go*, apparently, belongs to the class of activities. The morphological behaviour of the Russian *любить* /ljubit'/ 'love' is remarkably similar to that of the verb *идти* /idti/ 'go' derivationally and syntactically rather than to the verb *спать* /spat'/ 'sleep'. The adding of the perfectivising prefix *po-* results in the meaning 'for some time' with the verbs of state *sleep* and *sit* and in the inchoative meaning with the verbs *love* and *go*. Syntactically, the prefixed verb *sleep* may combine with time modifiers with *for* (*for two hours*, *for two years*) whereas such combinations are impossible for the verbs *love* and *go* which can only be used with such modifiers in their unprefixes (imperfective) form:

- (24) a. спать^{imp} /spat'/ 'sleep' поспать^{perf} /pospat'/ 'sleep (for a while)'
 b. сидеть^{imp} /sidet'/ 'sit' посидеть^{perf} /posidet'/ 'sit (for a while)'
 c. любить^{imp} /ljubit'/ 'love' полюбить^{perf} /poljubit'/ 'start loving, fall in love'
 d. идти^{imp} /idti/ 'go' пойти^{perf} /pojti/ 'head off, start going'
- (25) a. Я спал^{imp} /поспал^{perf} часа два 'I slept/had a nap for about two hours'
 b. Я сидел^{imp} /посидел^{perf} часа два 'I was sitting/sat for about two hours'
 c. Я любил^{imp} /*полюбил^{perf} (её) года два 'I loved (her) for about two years'
 d. Я шёл^{imp} /*пошёл^{perf} часа два 'I was going/went for about two hours'

The evidence from the semantic changes in the Russian verb *love* and its syntactical behaviour might suggest that this verb belongs to the class of determinate verbs of motion rather than to stative verbs. This underlines the fact that even though verbs of different languages may *name* or *refer* to the same kind of a phenomenon in the objective reality, they might have an underlyingly very different semantic structure.

2.3 Interaction of aspects and Aktionsarten.

2.3.1 Systemic relations in Aktionsarten.

In 2.2.1 we pointed out that Aktionsarten can be grouped according to a common feature that unites them (e.g. reference to different stages of the event, such as beginning, end or middle). It also appears that some Aktionsarten may considerably overlap (which often results in considerable terminological confusion). To illustrate this point, let us address the feature of imperfectivity. An imperfective event is contrasted to a perfective one, i.e. taken in its totality. Thus the imperfective in some way presupposes duration, or continuation, or material stability. This feature also contrasts to the momentary (punctual, semelfactive) or repetitive (iterative, habitual) course of the event, and is more than likely to coincide with the procedural meaning stressing the middle course of the event as opposed to its beginning or end. If we consider the aspectual distinction of momentary (contrasted to durative or repetitive) occurrence of the event, we might find it very close to the notion of perfectivity, i.e. the total view of the event.

This significant overlap of semantic distinctions in different groups of Aktionsarten also seems to be hierarchically organized. A punctual (momentary) event is necessarily perfective,

whereas a perfective event is not necessarily punctual and may presuppose a certain element of continuity, or duration (cf. Russian *почил*^{pf} /pospal/ 'slept for a while'). Similarly, a repetitive (iterative, habitual) event may be presented as either perfective or imperfective (cf. Russian *кашлять*^{imp} /kašljat' /- *покашлять*^{pf} /pokašljat' / 'cough'). In the same way an atelic (non-terminative) event is more likely to combine with the idea of duration, repetition or imperfectivity.

This suggests that Aktionsarten comprise a hierarchical system of semantic distinctions. The questions that arise in this respect and need investigating are the following: (1) what serves as a basis for the development of different Aktionsart semantic features, and (2) in which way they are stratified. These questions are dealt with in Chapter Three.

2.3.2 Aktionsarten and grammatical aspects.

We pointed out earlier in the paper (2.2) that many English verbs have an inherent lexical aspect while others may be considered to be more semantically abstract, and may acquire one of the lexical aspects in the context of an utterance, i.e. in usage. Those verbs that do have a lexical aspect get involved into a complex set of relationships with the grammatical aspects. Out of these relationships, new semantic distinctions may arise which can not be perceived in the verb taken in isolation.

The Progressive Aspect of English places the subject of the event in the middle of the event. In Chapter One it was shown that the graphical representation of this aspect presupposes a certain part of the event which is already completed, and some part which is to be completed. Apparently, the English Progressive also presupposes some mental boundary, the container

of the Event Time. These cognitive images result in an interesting interaction with the lexical aspects of some verbs that have it. The Aktionsart feature of a continuous, durative, indiscriminate event (as opposed to momentary and iterative) presupposes the same materiality of the event throughout its existence. This feature contradicts the idea of two parts of the event (accomplished and to be accomplished) as it presents the event as a uniform unanalysable entity. For that reason, verbs with the inherent lexical aspect 'durative' (indiscriminate) rarely combine with the Progressive as it violates the mental representation of an integral event (*want, love, know, possess, desire*). These three verb groups (mental activity, abstract relations and emotion) are marked in the lexicon for referring to 'indiscriminate' events. The term 'indiscriminate' seems more appropriate than 'durative' or 'imperfective' because the latter two events can be divided into parts such as *accompli* and *inaccompli*. This term also describes these kinds of events better than 'verbs of states' because states may also be durative and presented as consisting of several parts. In the case of the English *know* no such division is possible, and once a subject *knows* something, this state is not going to be changed or interrupted, unlike such states as *sleeping, sitting, dreaming* etc.

The other example of the interaction of lexical and grammatical aspects in English concerns the progressive forms of the verbs which denote an inherently momentary, semelfactive action. Once the Progressive provides the container for the Event Time, this container can only be filled with a multitude of semelfactive, single events. The resulting image is that of repetition, or iterativity, as in *was hitting, was jumping*.

With many English verbs, however, several interpretations may be possible. If the verb

is not inherently marked for a lexical aspect, as *jump*, the progressive form may be interpreted as either iterative or durative: *the kitten is jumping* (a. up and down; b. making a leap). In the first case the verb *jump* is viewed with the semelfactive Aktionsart synonymous to *bob up*, and in the second case it is viewed as having a durative Aktionsart or no Aktionsart at all, as the meaning of the phrase is completely covered by the semantics of the Progressive.

The lexical aspects interact with other grammatical aspects as well. Thus a momentary, punctual event is viewed as totally detached from the subject, is viewed in the totality of its completion when it combines with the Retrospective: *has hit*. This is a combination of semantic elements which is practically identical to the notion of perfectivity, and a corresponding Russian gloss would entail a perfective verb: *yđapyn /udaril/*. The situation differs significantly with verbs that are mentally marked for indiscriminate, durative occurrence. The indivisibility of the event into constituent parts would imply the previous duration as well as the present, current state: *has known*. The resulting image has a strong implication of imperfectivity. The usage is most appropriately rendered in Russian by a non-past imperfective: *знает /znajet/*.

The preceding considerations suggest that there exists a stratified system of aspectual distinctions some of which may be grammaticalised and revealed throughout the verbal paradigms whereas others belong to the domain of the lexicon, invariably accompanying the lexeme in its usage throughout morphogenesis. To obtain an understanding of the way grammatical aspectual systems operate is impossible without constructing a comprehensive model of aspectual distinctions which arise or are present in lexical items at the ideogenetic level and interact with the paradigmatic aspects at the ensuing morphogenetic level. The next chapter will attempt to provide an analysis

of possible aspectual distinctions based on the Guillaumean notion of 'event image', i.e. a complex cognitive realisation of the image conveyed by verbs.

Chapter Three.

Pre-chronogenetic aspectual distinctions.

This chapter outlines the development of the event image which leads to the base image entering the chronogenesis (3.1). The features acquired by the event image on each pre-chronogenetic stage and their linguistic representations are discussed in 3.2, and a stratified structure of theoretically possible aspectual subsystems is presented in 3.3.

3.1 Event image before Event Time.

The problems mentioned in the previous sections appear to be important for this research and some solutions have to be provided which are adopted in this thesis as working hypotheses.

The Guillaumean approach to aspects, as can be seen from Chapter One, describes aspects in terms of the location of the subject of the event relative to the event itself; aspect is consequently considered to be a feature of Event Time. Juxtaposition of the possible orientation of the subject relative to Universe Time creates a limited number of possibilities of aspectual tense forms in the indicative depending on the segmentation of Universe Time. Its directionality (i.e. the downward or upward flow of containing time) may contribute to the differences observed in various languages.

Chronogenesis is described as the process of the development of a time image and the emergence, first, of the representation of Event Time, and then of Universe Time. The event at the first stage of chronogenesis acquires such properties as being memorial, perceived or imagined. This naturally presupposes that the event can be represented, that it can be 'fleshed out' linguistically which is normally made possible by the fact that the event occurs, i.e. by its

existential feature. The graphic representation of Figure 3 (reproduced below for the sake of convenience) also presupposes a certain amount of necessary duration which is most evident in the case of the present participle but is also necessary for the past participle and the infinitive.

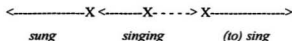


Figure 3.

The past participle denotes an event as if it were in memory, a completed event. In order to be completed the event must have a certain prior duration. Figure 3 also represents the subject in the middle of the event in progress indicating that the event is already perceived as having a certain entity (subject) which is inseparable from the event yet is not the event itself, a relationship which I shall refer to as predicativity. The representation must also carry at least two more features: (1) the verbal nature of the event, i.e. the notion of change, movement, motion, dynamics, kinetics (compare verbs with nouns which denote the event as a static entity), and (2) the Aktionsart which was earlier defined to be a central lexical property belonging to the lexicon and consequently the centre of the event image. Thus the event that enters chronogenesis is already a complex image with the features of

- i. possibility of occurrence
- ii. kinetics
- iii. manner of occurrence
- iv. predicativity (having a subject)
- v. duration (beginning and end)

Since at least one of the features (manner of occurrence) is directly related to the aspectual

system (the so-called semelfactive or iterative/frequentative Aktionsarten), we might hypothesize that the other features may also be connected to aspectual distinctions, i.e. to the other Aktionsarten, and appear at the pre-chronogenetic level. On the other hand, it might be of interest to trace the hierarchy of these features: it appears that the event image entering chronogenesis has been through different stages of development. The principle of stratified structures stipulates that previous developments are also consecutive and must necessarily constitute the foundational stages of chronogenesis. Taking this into account, the following event-image evolution leading to chronogenesis is suggested in this thesis. This evolution will be referred to as a *pre-chronogenetic level* and it is presumed to comprise several stages.

In Chapter One it was shown that the initial stages of chronogenesis involve three cognitive mechanisms, i.e. perception, memory and imagination, which participate in creating the distinctions of the quasi-nominal stage. All cognitive and mental processes, such as memory and imagination, are supposedly rooted in experience which in turn begins with observation, i.e. perception. It is logical to assume that perception is the cornerstone and the absolute beginning of cognition. Perception, consequently, may be taken as the starting point and the vehicle of image development. In the following sections (3.2) we shall try to reconstruct cognitive elements that are rooted in actual experience, or perception, and to trace the possible semantic expansion of the cognitive element when memory and imagination join perception in the cognitive process.

The development of the cognitive image of the event at the pre-chronogenetic level is presumed to be performed through the two basic operations described by Guillaume: the operation of particularisation and the operation of generalisation. The two processes are represented

graphically as a binary radical tensor (see 1.1). In this paper it will be assumed that the event-image evolves through successive stages represented by binary tensors, and that the result of generalisation of one stage serves as the basis for the particularisation of the next stage.

3.2 Event-image development.

3.2.1 The first stage. Occurrence.

The first step of the pre-chronogenetic stage should establish the basic property of the event through perception or memory. This first basic property is the realisation of the perception or memory of the perceived event, its reflection by consciousness. The mind comes to the realisation that what is and/or was perceived is or was indeed happening. This realisation gives rise to the idea of the reality of the perceived event which is thus viewed as existing, occurring.

The representation of the possibility of the occurrence may also be interpreted as the process of alienating the external world from the thinking subject, as a kind of anti-existentialism, as the realisation that the outside world exists regardless of the thinker/perceiving subject/experiencer.

3.2.1.1 Linguistic representation of Occurrence - the Inherent.

The possibility of occurrence might have a linguistic representation but because it is the very first stage of image formation, we are unlikely to find a clear grammatical category of a language unit which carries just this first cognitive feature presenting an event as occurring. The feature, none the less, is distinctly noticeable in such parts of speech as verbs and nouns:

just enunciating a noun carries a strong implication that what the noun denotes does exist. Similarly, even the verb root without any finite or non-finite morphology strongly implicates (names) the occurrence of the event. It might be that roots of notional, i.e. non-function words proclaim occurrence by naming a notion (the event). In other words, the most likely linguistic representation of the cognitive feature "occurrence" may be morphological roots of *nomina*, or content words such as nouns, verbs and adjectives because using the name suggests there may be a referent in the real world including the reality of the mental or psychological world of an individual, i.e. feelings, emotions, premonitions, intuitions, dreams, delirium etc. In more concrete terms, notional words of English taken in isolation may represent the clear case of the cognitive feature of Occurrence. Thus upon hearing *walk* an individual can identify an event without resorting to parsing or a syntactic analysis. The cognitive feature of Occurrence is, in fact, shared by the words belonging to different parts of speech as long as they *identify* or *name* the same kind of event. In this respect *a walk, walking, to walk, walker* in all their meanings share one semantic feature which unites them and opposes to words that name a different kind of events, e.g. *run, to run, running, runner, runaway; to fly, flier, flight* etc.

The semantic feature of the Occurrence of the event finds its manifestation in the verbal system in the so-called *Immanent Aspect* (Hewson 1997). The English simple verb forms are used to identify a certain type of event and assert its occurrence. In order to preserve Hewson's understanding of the term *Immanent* as a basic aspect whose characteristics depend on the way Universe Time is represented in a particular language, the term *Immanent* will be substituted in this thesis by a terminological use of the word *Inherent* to denote the semantic feature of

the Occurrence of the event. In our approach, the Inherent is taken to be more of a semantic category, detached from Universe Time and the stages of the event image development preceding the emergence of Universe Time. It is assumed that this abstract cognitive notion may have a verbal representation by a specifically marked form (as in English or Uzbek, see examples below), or it may be incorporated into a different aspectual form, as in Slavic languages. The Inherent aspect reflects the perceiving subject's realisation of the objective reality and his/her awareness of the occurrence of the event. Taking a closer look at verbs, it is easy to notice that uttering in itself constitutes the statement of occurrence. All the further stages of image development, and consequently, all the other aspectual and modal distinctions add up in the verb form actually used in speech. Nevertheless, it is possible to prove the existence of the Inherent and its presence in virtually any verbal form.

The English language provides an excellent opportunity for that. It has Inherent Aspect which is unmarked for any other aspect and only carries pre-chronogenetic aspectual features except for tense, i.e. referring an action to a past or non-past time sphere of Universe Time. I refer to the form which was traditionally called *simple*, or *indefinite* tense (*I speak, he speaks*). The usage of this form necessarily states the occurrence of the event in either of the two time spheres. It allows for the verbal forms to be understood in a variety of ways, as in the following examples:

- (26) a. Pat goes to school
b. Pat goes to school every day
- (27) a. Chris studies English
b. Chris studies English every morning

- (28) a. Glass breaks
- b. Glass breaks easily
- (29) He/she shoots, he/she scores!

The verbs in sentences (a) above illustrate the presence of the Inherent by merely stating the fact that some event occurs. It does not have either perfective or imperfective meaning, and may acquire the image of repetitive actions in the context of sentences (b). Even in those examples and in *He shoots, he scores*, however, the Inherent is present as the sentences state that a certain event occurs, and then further specify that the occurrence is regular in sentences (b).

The use of the Inherent is not restricted to a certain tense. If we consider Forsyth's (1970:15) examples (30), we can see that the verb *to write* in those examples may be said to have several Aktionsarten yet all the three examples clearly show that its basic function is to identify a certain action without other aspectual distinctions:

- (30) a. I wrote him a letter
- b. He wrote a letter every week
- c. While he wrote I read.

The Inherent provides for the possibility of using verbs in most general statements as in (28) and in immediate commenting of the perceived events (29). The latter example, interestingly, corresponds to the Russian noun phrases in TV ice-hockey commenting: *Brosok! Gol!* 'Shot!

Goal!’

If the above statements on the English simple indicative forms may arouse criticism, the use of the auxiliary *do* in affirmative sentences can provide another example of the Inherent. The auxiliary in such cases stresses the fact that the event denoted by the notional verb occurs or occurred in reality. Its other aspectual characteristics in such instances appear to be irrelevant, including the lexical Aktionsart. What does matter, however, is the assertion, or naming of the reality of the event, as in (31) which represents verbs with different lexical aspects:

- (31) a. I did take the medicine.
b. This person does have an alternative.
c. Pat does know about the meeting.

In negative constructions it is the auxiliary with its generalised meaning of occurrence that is being negated, and normally not the lexical entry naming the event.

The idea that verbal forms can be used merely for indicating occurrence is not a novelty in linguistic literature. Goldsmith & Woisetschlaeger point out that “there are two ways of describing the world: one may describe what things happen in the world, or one may describe how the world is made that such things may happen in it” (Goldsmith & Woisetschlaeger 1976:3) and come to the conclusion that the non-progressive verbal forms refer to a ‘core’ or ‘central’ cluster of modal properties whereas other verbal forms, such as the progressive, depart from this core in any of a small number of directions (Goldsmith & Woisetschlaeger 1976:2). This may be interpreted in the following way: simple tense forms describe what things happen in

the world, name the events without indicating in which way or what manner the things happen. Compare the Inherent *hope* versus progressive *is hoping*. The latter, according to Wallace (1982:204) is less certain in *I hope you'll come* versus *I am hoping you'll come*. Forsyth (1970:5-6) notes the use of Russian imperfective verbs with no semantics normally attributed to the imperfective aspect, and states that in such cases the function of the verbs “ is simply to name the type of action, to identify it lexically”. Bondarko (1971:11) gives the example of an imperfective verb to which one can not attribute the property of denoting an action in its development, duration or repetition, i.e. usual meanings of Russian imperfective verbs (32):

- (32) Вы давали^{имп} лекарство?
 You.PL. give.PL.PAST medicine.ACC.
 ‘Did you give the medicine?’

The presence of the imperfective suffix in the verb of (32) does not add the iterative meaning to the phrase, and the form can be easily substituted by the perfective verb form *дали* /dali/ ‘gave’ without significantly changing the meaning of the sentence.

In such non-durative usages imperfective Russian verbs serve the same purpose as the English simple forms, i.e. to express the Inherent by naming the event and thus stating its occurrence (see 6.1).

The Inherent can not be described as a purely verbal category. By its very nature it must be inherent in all notional lexemes, i.e. in words that can have an external referent in reality, such as verbs, nouns and adjectives. In this respect the verb *to shoot* equals the nouns *shot* and

shooting. The differences between the verb and the noun, as will be demonstrated further, can be accounted for by the differences in reflecting the cognitive stage of Stasis/Kinesis (3.2.2), whereas the differences between the two nouns *shot* and *shooting* can be explained by the features of Manner of Occurrence (i.e. singular occurrence versus repetitive versus indiscriminate occurrence - see 3.2.4). The latter meanings, actually, are also inherent in the sense that they are inseparable from the lexeme and constitute its semantic content. Such inalienable features will be referred to as *lexical aspects* in the following chapters. What is important to stress is that the common semantics that unites *to shoot*, *shot* and *shooting* is the Inherent lexical aspect, i.e. naming, identifying a certain kind of event, whereas what separates them are the following stages of the event-image development which add several other features to the event image.

A cognitive feature such as Occurrence of the event and the ones discussed further in the paper are open to semantic expansion, to subsequent development when the cognitive feature may be associated with a certain property evoked by the cognitive feature. The Occurrence of the event may be strongly associated with the reality of the event, with its ability to be observed and registered by senses, to be perceived. Thus it is possible to explain the following verbal form in Uzbek (33) as a semantic expansion or further specifying, particularising of the cognitive feature Occurrence, as stressing a certain aspect of Occurrence, namely, the ability of the event to be perceived. Uzbek has verbal forms which denote events occurring strictly during the moment of speech, or slightly extending over the actual moment of utterance, the so-called Concrete Present (Kononov 1960:213) as in (33). This form is contrasted to the regular Progressive Present (34) which is formed in a usual way for Turkic languages, i.e. the locative of the nominal infinitive

with personal inflexions:

- (33) a. ўқи-яп-ман /ʊqi-ʏap-man/
read-SUFF.-1SG
'I am reading (as I am saying it)'
- b. Мен журнал ўқи-яп-ман
I magazine read-SUFF.-1SG
'I am reading a magazine (right now)'
- (34) a. ўқи-моқ-да-ман /ʊqi-moq-da-man/
read-INF.-LOC.-1SG
'I am reading'
- b. Мен журнал ўқи-моқ-да-ман
I magazine read-INF.-LOC.-1SG
'I am reading a magazine'

The present Progressive form expresses an action which "having begun before the moment of speech is going on at the moment of speech and will continue for some time in the future" (Kononov 1960:215) and in this respect is practically identical to the English Progressive. The Concrete Present, on the other hand, denotes an action which is being perceived in the moment of speech, and is a representation of the event occurring in the moment of communication, occurring in front of the speaker's eyes. This tense or, rather, aspectual form does not have a past counterpart.

To sum up the consideration of the Inherent as a linguistic representation of the cognitive image of occurrence of the event, we can say that the process of immediate experience (perception of the event) results in the mental realisation of that event, in the awareness of the thinking subject (the perceiver) of the reality of something outside the mind. It may be considered to

be an absolute beginning in the event image development, and serves as a basis for the first operations of particularisation and generalisation represented by a binary tensor.

3.2.2 The second stage. Stasis and Kinesis (movement).

We have been speaking so far about the mental image of an event as a motionless phenomenon which exists/occurs and thus is capable of being perceived. The next feature in the development of the event-image is the realisation of spatial movement, change, motion, or that which is kinetic as opposed to that which is static, motionless. The cognitive realisation of movement may then be followed by the perception of different kinds of movement: movement as an unorderedly, unstructured change, or movement proceeding in a certain direction.

It might seem reasonable to start the consideration of how the realisation of movement appears while remaining at the perceptive stage, i.e. at the stage of perceptive experience with neither memory nor imagination involved¹. The realisation of movement, probably, is a result of the two mental operations described by Guillaume as operations of particularisation and generalisation. The particularising, narrowing movement of thought leads to the realisation of a static entity against the background of equally static subjects. This operation is easy to imagine: apparently, it is performed by each of us when we look at a landscape: the undivided perceptive whole is fragmented by consciousness into particulars, further recognized as a rock, or a hill, a tree or a dark mass of a forest or whatever other parts a picture might contain. In

¹Perception is necessarily accompanied by *retentive* memory which is a short-term, subconscious memory and which is not stored in consciousness and can not be easily retrieved. The statement about non-involvement of memory refers to the absence of the retrospective, long-term memory.

the absence of motion, the perceiving mind comes to the realisation of different colours, shapes etc. This particularising operation is an exigent prerequisite for the perception and realisation of movement since movement by its nature is relative and can only be perceived against the static background. One can realise the relativity of movement when stuck in a traffic jam and when all that can be seen is other vehicles: one can then have a sudden illusion that one's car is backing up on its own when, in fact, the other vehicles are moving forward.

Once static objects (i.e. the background and the figure) have been identified and realised, the working mind can notice change occurring in some of them. The perceptive images are not difficult to evoke: this is how we notice a current in the midst of a pool, or the change in the positions of the tree leaves, or the fading light of the sun hidden by clouds. In other words, the narrowing movement of the mind brings the realisation of separate objects (percepts) in the surrounding reality whereas the generalising movement of the mind determines percepts which change, i.e. move. This can be best represented by the radical binary tensor (Figure 17):



Figure 17. Kinesis and Stasis.

The end of particularisation is the perceptive segmentation of reality. It also marks the beginning of a radically different process, the process of generalisation which leads to the evolvment of the notion of kinesis, or movement (motion) in its broadest sense. We might hypothesize that the linguistic representations of these two cognitive features (of a static event vs. kinetic event) somehow mark the enormous differences underlying these representations.

3.2.2.1 Linguistic representations of Stasis/Kinesis - the Kinetic.

The cognitive features Staticity and Kinetics give rise to the first type of distinctions which constitute the first level of lexical aspectual distinctions. The lexical aspects which reflect the notions of this level of the event image development will be generically referred to as the Kinetic. The lexical meaning corresponding to the cognitive image of the static event will be referred to as the Stative Aktionsart, or Stative lexical aspect. The lexical meaning of some kind of change, movement will be referred to as the Non-Stative Aktionsart.

The distinction between static and kinetic events, probably, underlies the distinction between nouns and verbs. However, it would be unreasonable to claim that verbs are necessarily marked by the cognitive feature of Kinesis. It appears that verbs may have a lexical aspectual distinction of this cognitive stage, cf. the categories Stative and Fientive in Semitic languages (Diakonoff 1965). The former apparently make a group which suits best the category of Vendler's verbs of state (Vendler 1967:101) whereas the latter would fit into the category of activities. Our approach differs from that of Vendler's in a number of points.

The cognitive feature of Stasis is more suited for being represented by nouns or adjectives. It is undoubtedly present in the verbals such as the infinitive and participles which they share with nouns. It is therefore quite logical that Guillaume came up with the term *nominal*, or *quasi-nominal mood* to describe these forms.

We might consequently expect a limited number of verbs that can render that cognitive feature. In English stative verbs are represented by such groups as verbs of volition (*want*), verbs of abstract relations or existence (*exist*, *possess*), and verbs of mental activity and lasting

emotions (*know, love*), or such verbs as *cost*. These are true verbs of state in the sense of Vendler.

The notion of Kinesis, however, is rather abstract at this stage of image development, and it is most likely to represent an event against the background of something else. The cognitive feature of Kinesis, i.e. realisation of some kind of movement, does not necessarily imply movement in space or transportation. It does imply, however, a certain change, movement which can be divided into previous movement and subsequent movement. In this respect the cognitive feature of Kinesis and the lexical Non-Static aspect are manifest in both Vendler's 'verbs of state' such as *sleep, stand*, and his 'verbs of activity', such as *do, read* etc.

A possible test for identifying verbs which have a Static Aktionsart and represent static events might be their resistance to the Progressive grammatical aspect. As the Progressive presents an event with one part already accomplished and a part to be accomplished, the cognitive feature 'Stasis' interiorised in the consciousness would resist the usage of 'stative' verbs with this aspect. For that reason sentences like the following examples (35) are marked in normative grammars of English as impossible:

- (35) a. *The queen is having three children.
b. *The students were not knowing the answer during the test.
c. *Chris is liking his/her new friend.

If we examine other languages for examples, we will discover that truly 'stative' verbs demonstrate considerable peculiarities in their morphological and derivational paradigms. For example, the Russian verbs bearing the cognitive feature 'Staticity' are all imperfectives that

lack perfective pairs. The addition of the so-called “empty” prefixes, i.e. prefixes which are said to have no lexical import and only changing verbs into perfectives, leads to a totally new lexical item (36)-(37), occasionally preserving the imperfective aspect. In a number of cases the addition of such prefixes is impossible (38). Cf. the following examples in which the static verbs were added prefixes *po-*, *s(o)-*, *u-*, *o(bo)-* which are said to be pure perfectivisers:

- (36) a. *знать*^{imp} /znat’/ ‘know’
 b. *познать*^{pf} /poznat’/ ‘learn’
 c. *узнать*^{pf} /uznat’/ ‘find out’
 d. *сознавать*^{imp} /soznavat’/ ‘be aware, realise’
 e. *обознаться*^{pf} /obozanat’sja/ ‘mix somebody up, take someone for another person’
- (37) a. *быть* /byt’/ ‘be’
 b. *побыть*^{pf} /pobyt’/ ‘stay’
 c. *убыть*^{pf} /ubyt’/ ‘depart’
 d. *сбыть*^{pf} /sbyt’/ ‘deliver’
- (38) *иметь* /imet’/ ‘have’ - **сыметь* - **пойметь*¹ - **обыметь*

This can be compared to the fact that the English stative verbs can not combine with verbal particles unlike the overwhelming majority of the other verbs: **know up*, **believe out*, **own down*.

It is important to emphasize that the cognitive feature ‘Stasis’ in verbs is very different

¹This form may be used in the colloquial language in the meaning of ‘to use someone for one’s own purpose’.

from such concepts as 'durative' or 'imperfective'. The fact that only a few verbs in English and in Russian are stative is evident from their morphological and derivational behaviour when the lexical distinction 'Stative' interferes with certain grammatical aspects. This does not happen with durative or imperfective verbs that do not have the cognitive feature 'Stasis' in their lexical semantics.

In cognitive terms, the opposition of static versus non-static events is similar to the opposition between mass nouns and abstract nouns. Non-static, i.e. kinetic events may have an internal structure and may be represented as comprising a multitude of single elements. It is tempting to present them as a number of moments m_1, m_2, m_3 etc., but the idea of 'moments' is too closely related to the notion of time, and we are at this stage discussing cognitive features which precede the emergence of the notion of time as it only appears at the first stage of chronogenesis. For that reason we shall operate with the idea of 'quantum of perception', and the moments of perception will be designated as q_1, q_2 etc. Note that perception was earlier said to involve retentive (operative) but not long-term (retrospective) memory.

We may conclude that the second stage of the event-image development leads to a cognitive opposition Stasis versus Kinesis. The cognitive feature 'Stasis' is associated with an event viewed in its staticity relative to the other static entities. This feature is more common in nominals, i.e. nouns, adjectives and quasi-nominals (the infinitive, the gerund and participles). There is, however, a limited number of verbs which have the feature Stasis in their semantic composition. These verbs, called here 'stative verbs' have only a limited number of features which appear at the subsequent stages of the event-image development and demonstrate a somewhat idiosyncratic

behaviour in finite forms and in derivation (see 6.3.6). The verbs called 'non-stative' correspond to the cognitive image of Kinesis and have this feature in their lexical meaning as Aktionsart unless a language system has morphological means to regularly represent the two aspectual distinctions.

3.2.3 The third stage. Determinate and indeterminate movement (Directionality).

At the previous stage the event-image acquired one of the two features associated with the cognitive concepts of Stasis and Kinesis. The latter presents an event as a changing, moving entity on the background of static entities, and carries the idea of 'movement at large', 'general movement'. This idea, or mental representation of general movement, motion in its first realisation appears as the result of the generalising movement of thought. As there are only two basic operations, generalisation should be followed by the next particularisation for which the previous image serves as the basis. The idea of Kinesis on the right hand side of the binary tensor in Figure 17 underlies the next particularising operation which leads to the idea of directionality.

Once a kinetic representation is established, it may serve as a basis for a representation of a different kind which we will call *directionality*. Movement can be viewed as indiscriminately chaotic, just the perception of Brownian movement without any direction or goal. Movement and motion can also be perceived as proceeding in a certain direction. Other analogies that could be given to illustrate these different perceptive features are the images of water as a whirlpool and as a steady stream in otherwise shallow and seemingly motionless surrounding. Another perceptive image is that of a sudden whirl or gust or wind as opposed to a steady draft blowing

from somewhere and affecting the tactile receptive nerves on only one side of the body.

Thus the unorderedly, unstructured, chaotic movement in perception will be called *indeterminate*, whereas movement proceeding in a certain direction, orderly and structured movement will be referred to as *determinate*. Indeterminate movement may be compared to a high-speed footage of a crowd in a railway station, whereas the determinate movement is more comparable to marching troops or one-way traffic.

The perception of movement as ordered, structured and/or proceeding in a certain direction reflects the mental operation of particularisation whereas the perception of movement as chaotic and unordered reflects the mental operation of generalisation. Both these operations may be represented graphically by means of the radical binary tensor (Figure 18).



Figure 18. Determinate and Indeterminate movement.

Determinate movement may be analysed as having a definite, determinate vector in each moment, or quantum, of its perception, so that movement in moment q_1 has exactly the vector pointing in the same direction as movement in moments $q_2, q_3 \dots q_n$. In the case of indeterminate movement the vector, or directionality of movement in quantum of perception q_1 is unrelated to the vector of moment q_2 or any following moment. This means that determinate movement has a definite trajectory which can be predicted or constructed once at least two points of the movement have been intercepted by consciousness whereas the prediction of the indeterminate movement is impossible: the position of a moving object or entity at any following moment

of perception is quite random.

So far we have been discussing the perception of movement as proceeding in a definite direction or being chaotic or unordered. An important consequence of representing determinate movement in Figure 18 is the fact that the determinate movement is necessarily heading towards its termination, endpoint. This common fact is reflected by consciousness of any individual many times through direct experience: a baby crawling in a definite direction will necessarily reach a certain point at which any further movement will be impossible; a bird flying in the sky or clouds moving across it will necessarily disappear out of sight.

One may argue that not all instances of determinate movement necessarily terminate in perception. Thus a creek or stream is undoubtedly perceived as moving in a certain direction, and continues this movement as long as the observer might be watching it. Yet such instances make a relatively small number of the total number of perceptive acts in which determinate movement necessarily reaches its endpoint, saturation, completion. Besides, following the determinate movement of the stream will ultimately confirm that its flowing ends when it reaches the lake or the sea, i.e. will bring the realisation that determinate movement *should* end even if not within this particular or single perceptive act. This is not the case with indeterminate movement which might *stop* and thus end but not *finish*. I well remember my son's obsession with running water after a heavy rain or in early spring when the snow was melting. At the age of 2.5 he was dragging me all around the neighbourhood watching the running water until it disappeared in the street sewer system. At this age he was endlessly playing with the tap water jet in the bath. Playing with water and understanding some properties of the determinate

movement seems to be a universal stage in children's cognitive development well described in the literature (Fein 1978; Seifert & Hoffnung 1991:202-3).

The account of the perception of determinate and indeterminate movement, it appears, is recorded in memory with an important implication that any definite, directed, i.e. determinate movement must come to an end, must reach a point when it is no longer. General, indeterminate movement, on the other hand, may imply a certain degree of repetitiveness, or recurrence: once you watch fish in a fish tank or an insect trapped between the windows you may realise that their movements, once they do not leave the perceived area, have to be somewhat repetitive in order to continue in an intricate pattern. This repetitiveness, however, is never an exact repetition of the same movement, or trajectory. These two meanings (end-point and repetition) are the semantic expansions arising out of the cognitive features in the course of event-image development similar to the idea of immediate perception expressed by the Concrete Present in Uzbek (see 3.2.1).

3.2.3.1 Linguistic representation of directionality - the Directional.

It may be postulated that the concept of determinate and indeterminate movement which is the next cognitive category in the event image development, leads to the realisation of the linguistic category of the Directional used here as a generic term for the Determinate and Indeterminate lexical aspects. This category involves the notion of movement which can be perceived either as unordered permutations similar to Brownian movement, or as directed organized movement. The notion is rather abstract, and its illustration in English presents some difficulty

due to the absence of a grammatical morpheme rendering just this one concept. Besides, the notion of directionality is closely connected to what is often described as ‘telic verbs’ (Comrie 1976:44-48) or ‘telicness’ (Binnick 1991:180) discussed below (3.2.3.2) and the realisation of spatial iterativity (3.2.3.3).

There are no examples of a morphological category corresponding to the cognitive category of Directionality in Germanic languages. Slavic languages, on the other hand, have a distinct morphological opposition of determinate verbs versus indeterminate verbs. Let us first consider examples from German and English. We may refer to the use of different auxiliaries with German verbs of motions, as in (39) from Lloyd (1979:49-50):

- (39) a. Er hat den ganzen Tag geschwommen ‘He swam all day’
b. Er ist über den Fluss geschwommen ‘He swam across the river’

In the first example the verb *schwimmen* ‘to swim’ is used with the auxiliary *haben* ‘have’ and denotes an indeterminate action, the activity of swimming. In (39b) the auxiliary is *sein* ‘be’ and the verb has a distinct directional usage.

English, in all probability, has the notion of directionality as a discourse category. Examples like (40) - (43) can be interpreted as either determinate (a) or indeterminate (b) depending on the context and situation of the utterance:

- (40) Chris *is going* to the park
a. is walking, going for a walk

- b. is heading to, setting out for
- (41) The baby *is crawling*
 - a. is moving around, not sitting or lying
 - b. is moving to a certain direction, e.g. towards the parent
- (42)
 - a. Pat bowed and *left* the house
 - b. Pat *left* Glasgow for London
- (43)
 - a. I *walked* for an hour or so
 - b. I *walked* to work that morning

Manifestations of the Directional lexical distinctions in English seem to constitute the semantic potentiality of the English verbs. One can notice a number of constructions which show the contrast of the Directional. E.g., such constructions as *have a look*, *have a drink* display the semantics of the Indeterminate Aktionsart and are semantically opposed to *take a look*, *take a drink* which are marked for the Determinate. There are also instances of lexical pairs which might be interpreted as constituting a semantic contrast of determinate versus indeterminate movement abstracted from the idea of movement or spatial transportation. These pairs (*to do - to make*; *to end - to finish*; *to begin - to start* etc.) will be discussed in the following section.

It is, probably, best to address non-South Slavic languages for the illustration of the Directional. All Slavic languages with the exception of Bulgarian, Serbo-Croat and Macedonian (Schuyt 1990:317) have pairs of imperfective verbs of motion which are identical in lexical

meaning, i.e. in denoting the same kind of locomotion. As both of them are imperfective which is traditionally considered the basic aspectual distinction, these pairs are not very often discussed in aspectual studies (for a detailed analysis see Forsyth 1970:319-346). It should be born in mind that the Slavic determinate - indeterminate contrast is regular even though the morphology involved often makes it impossible to determine a marked member in each pair. Below is the list of Czech and Russian verbs of motion which demonstrate the contrast of Directionality:

(44) Czech	Russian	
a. bříst- brodit	брести - бродить /bresti - brodit'/	'wade', 'roam', 'wander'
b. hnát - honit	гнать - гонять /gnat' - gonjat'/	'drive/chase/scareaway'
c. jít - chodit	идти - ходить /idti - xodit'/	'go' (on foot), 'walk'
d. jeti - jezdit	ехать - ездить /exat' - ezdit'/	'go (by vehicle)'
e. lézt - lazit/lozit	лезть - лазать/лазить /lezt' - lazat'/lazit'/	'creep', 'sneak'
f. nést - nosit	нести - носить /nesti - nosit'/	'carry'
g. vézt - vozit	везти - возить /vezti - vozit'/	'transport'
h. vést - vodit	вести - водить /vesti - vodit'/	'lead', 'drive (a vehicle)'
i. vléci - vláčit	- -	'pull'
j. - -	бежать - бегать /bežat' - begat'/	'run'
k. - -	лететь - летать /letet' - letat'/	'fly'
l. - -	плыть - плавать /plyt' - plavat'/	'swim', 'sail'
m. - -	ползти - ползать /polzti - polzat'/	'crawl'
n. - -	тащить - таскать /taščit' - taskat'/	'drag', 'carry'
o. - -	катить - катать /katit' - katat'/	'roll'

The number of the pairs varies in different languages from nine in Upper Sorbian and

Czech (Schuyt 1990:128,165) to between 14 and 17 in East Slavic according to different authors (Ferm 1990:21).

Further in this thesis we will propose that the category of Directionality encompasses a much wider range of verbs than just the verbs of motion. At this point we shall limit ourselves to discussing the latter.

The verbs in (44) all belong to the morphological category of imperfective verbs with the first member of the pair being determinate. The difference between them is difficult to describe. Meillet suggests that “La catégorie de l'imperfectif déterminé, tout en faisant partie du groupe de l'imperfectif, est une forme de transition entre imperfectif et perfectif” (Meillet 1934:283), while Forsyth notes that “it might be argued that the relationship between them is of a purely lexical nature, having nothing to do with aspect as an element of grammatical meaning” (Forsyth 1970:325). A number of apparently systemic features that the pairs of the verbs of motion demonstrate, however, suggest that the distinction between them is not a mere lexical difference. To begin with, even in terms of lexical semantics the distinction is hard to establish. Forsyth states that in the case of these verbs “the speaker’s view of action is restricted to a specific moment of time.... The motion of the subject is, as it were, observed taking place ‘now’, and it is self-evident that any body observed in motion can only be moving in one direction” (Forsyth 1970:319) against which it is difficult to agree: imagine looking at a fish tank full of fish swirling around it, or at bees in a bee-hive.

Forsyth insists that a clear definition of the notion ‘directionality’ be made in order not to confuse it with the more concrete factor of *destination* or *purpose*. Both the determinate

and indeterminate Slavic verbs can be used with the phrases denoting the latter two notions:

- (45) a. Я хожу в школу /ja hožu v školu/ (Indeterminate) - 'I go to school'
b. Я иду в школу /ja idu v školu/ (Determinate) - 'I go to school'

The first example may also imply iterativity, or habituality (*I am a student*, German *Ich gehe zur Schule*) while the second may have an implication of 'here and now' or of a future reference (*I am going/am on my way to school*, German *Ich gehe in die Schule*).

On the morphological level, the prefixed determinate verbs become perfective whereas indeterminate verbs remain imperfective after prefixation (in most cases), as in (46) where the left column represents determinate verbs and the right column contains indeterminate verbs:

- | | |
|--|--|
| (46) a. бежать ^{imp} /bežat'/ | бегать ^{imp} /begat'/ 'run' |
| b. сбежать ^{pf} /sbežat'/ | сбегать ^{imp} /sbegát'/ 'escape, to flee' |
| c. убежать ^{pf} /ubežat'/ | убегать ^{imp} /ubegát'/ 'run away' |
| d. побежать ^{pf} /pobežat'/ 'start running' | побегать ^{pf} /pobegat'/ 'run (around) for a while' |

Indeterminate verbs may convey the idea of iterativity, or habituality whereas the determinate verbs lack this implication (Forsyth 1970:322). Forsyth adheres to a negative definition of the indeterminate verbs stating that they do not express motion taking place at a specific moment and in one direction (Forsyth 1970:322). We can not agree with the first part of this statement, as the indeterminate verbs can certainly be used in a context specifying an exact moment.

The second part of Forsyth's statement, i.e. that indeterminate verbs can not express motion going on in a certain direction, is absolutely correct. It is exactly this feature which in our analysis is correlated to the narrowing, particularising movement of thought, that determines the basic distinction between the Determinate and Indeterminate Aktionsarten. The former denotes movement proceeding in a definite direction (hence the category of DEFINITE in Thelin 1978:16,18). This realisation on the perceptive stage may further be developed through participation of memory and imagination into notions of telicity, purposefulness, iterativity and finally will help us to explain the systemic developments and behaviour of these verbs (see Chapter Six) as consequences of the initial particularisation.

3.2.3.2 The Directional and telicity.

The Directional lexical aspect is viewed in this thesis as a basic aspectual distinction which is open for further development. On the perceptive level, the movement can be realised as proceeding in a definite direction (Determinate Aktionsart). Even within the same perceptive act it might imply that the subject of the perception, and thus, the movement itself, will disappear out of perception (e.g. watching a moving cloud until it is out of sight). The particularising movement of thought will finally reach a point when the directional movement can be perceived as accomplished. That means that directionality implies the idea of destination, or purpose, and result as its secondary attributes. It also implies a natural end, completion of the movement once the destination is reached or the event is no longer available for perception, especially once those perceptive acts are recorded in the memory.

Indeterminate Aktionsart, on the other hand, implies the idea of motion as activity, a continuous process without any determined direction or inner structure. Unorderly movement throughout a perceptive act will naturally result in a realisation of repetitive movements, for in order to remain open for perception the event must unroll in front of the perceiving subject, and the subject of the indeterminate event will have to accomplish a kind of circular movement (that is why Russian indeterminate verbs in the infinitive are easier to express by the English verbs with the preposition *around*: *to run around*, *to crawl around*, *to fly around* though such translation is often impossible in concrete sentences with these verbs).

It appears that completion, purpose, accomplishment are logical semantic expansions of the perception of directional movement, they are secondary developments similar to the notion of habituality which is a natural expansion of the perceptive image of a repetitive event. They are a result of a multitude of perceptive acts in which determinate movement of the event came to an end either because the destination was reached or because the moving object disappeared out of perception. With this understanding we can take a closer look at the notion of telicity, or telicness as it is treated in the linguistic literature.

Comrie discusses the issue of telic/atelic verbs by equating 'telic situations' (denoted by telic verbs) to 'accomplishments' (Comrie 1976:44). Thus the event (in Comrie's terms - 'situation') described by the sentence *John is singing* is atelic as it does not contain a certain terminal point though it can be stopped. The sentence *John is making a chair*, on the other hand, must necessarily come to an end, thus the event described has a certain terminal point, the point at which the chair is complete, consequently, it is telic (Comrie 1976:44). The test

for atelic verbs, suggested by Comrie, consists in the possibility of deducing a positive answer about the same situation (=event) viewed from the perspective of the perfect. From the first sentence we may deduce that *John has sung* while the second situation does not allow us to conclude that *John has made a chair* (Comrie 1976:45). Comrie states that while events can be either telic or atelic, verbs can not be easily labelled with the same terms:

Similarly, although *John is drowning* describes a telic situation (=event - VV), the sentence *cats drown if you put them in deep water* is not telic, since it refers to an ongoing tendency for cats to drown, a tendency that can go on indefinitely, irrespective of the number of cats who have completed their act of drowning (Comrie 1976:45).

Comrie finally makes the conclusion that unambiguously telic/atelic situations (=events) are difficult to find (Comrie 1976:46) but stresses the importance of the distinction in aspectual studies. Thus, combined with the perfective/imperfective opposition, the semantic range of telic verbs is considerably restricted.

The problems that arise in such treatment of telic/atelic verbs was noted by Binnick:

The difficulty is that if telicness is a property of sentences (describing situations), then it makes no sense to talk of the perfective or imperfective of a telic (or non-telic) expression, since perfectivity is a verbal category, and hence of smaller scope than telicness (Binnick 1991:191).

Binnick adds that telicness is an attribute of situations and is not overtly marked but merely implicit in the meanings of expression whereas perfectivity, e.g., is a category overtly marked in the verb or by an auxiliary (Binnick 1991:191).

While it is obvious that there is a certain cognitive category intuited by linguists, its properties remain rather vague, either correlated to the notions of accomplishments, or boundness,

or culminativity (cf. Lloyd 1979:49). It might be reasonable to suggest that the notion of determinate direction so obvious in Slavic verbs of motions, underlies the images of telic situations, or events that “maintain a particular course” (Lloyd 1979:51) and thus may come to a logical end (completion, destination, achievement of a goal), i.e. accomplishment. The deductions that can be made from telic situations as described above, are normal psychological associations similar to projecting a directional movement to an expected result.

As we have stated that determinate movement presupposes an endpoint, result, destination, or termination, it might be possible to treat telic-atelic situations in terms of directionality. In this case telic events correspond to determinate movement, movement that stipulates some point of completion. This is made explicit by specifying a certain quantity or duration of the event: *John is singing* or *John is singing songs* represent indeterminate movement, consequently, atelic situations, or events, because the quantity of the event is not specified. *John is singing a song/five songs/for two hours* represent telic situations, consequently, a particular, determinate movement because the sentences contain an indication of the temporal or spatial quantity, of the endpoint at which the event is bound to be terminated or completed.

Telicity may consequently be treated as an expansion of the cognitive notion of determinate movement applied to non-motional events, i.e. events that are kinetic but do not include any kind of spatial movement or transportation. It finds its best expression in the description of events which have definite arguments, i.e. arguments specified for a certain quality or quantity (*John is singing five songs; John is singing till the end of the hour*). Unlike the category of the Directional lexical aspect in Slavic, telicity may be considered a category of discourse in

English and it finds its realisation in certain linguistic and situational contexts.

Besides contextual representation of determinate and indeterminate movement English has lexical pairs which may be interpreted in the same way. Such pairs as *to do - to make*, *to tell - to say*, *to talk - to speak*, *to look - to see*, *to shut - to close*, *to begin - to start*, *to end - to finish* are analysed by Tobin (1993) in terms of markedness for result: the first member of each pair is unmarked either for process or result while the second is marked for result:

The marked member of the pair, making a specific claim for RESULT, is reserved for those linguistic and situational contexts where an action, state, or event must be perceived 'resultatively': i.e. taking its result in the form of a goal, consequence, conclusion, destination, telic endpoint etc. into account (Tobin 1993:17).

While it is impossible to point at a formal marker of RESULT in the English pairs of verbs, Tobin is undoubtedly right in ascribing markedness to them. They must have a necessary cognitive marking in the minds of the native speakers of English for directionality, and their very form makes them marked for result as a consequence of the determinate movement that they represent.

3.2.3.3 Directionality and iterativity.

In the previous section we tried to connect the notion of particular, determinate movement to the notions of goal, state, termination, endpoint, telicity, destination all of which appear to be an extension and a natural result of a movement proceeding in the same direction. Now we will try to examine a possible semantic extension arising out of the perception of general, indeterminate movement.

As was shown in 3.2.3, indeterminate movement presupposes that the moving substance/object is continuously present in perception. In this case the moving object should necessarily occupy the same or nearly the same spatial point more than once in the course of perception in order to remain within the scope of perception. Thus general, indeterminate movement may imply the idea of repetitiveness, iterativity (although this is not the clear case of iterativity as a repetition of *identical* punctual events discussed below). The intuitive realisation of an intricate repetitive pattern involved in the perception of indeterminate movement might be the cognitive foundation on which the idea of iterativity rests. English, as was noted before, has somewhat generic lexemes to represent events, and these lexemes may cover some meanings in certain contexts for which other languages might require special morphology. Whenever there is a need to stress the indeterminate movement as opposed to determinate, particular movement, the adverbial particle *around* may be used. It is symptomatic that the semantics of the preposition *around* implies the idea of repetitive, circular movement (change of direction) which is the most appropriate means to cover the notion of indeterminate movement.

To conclude the discussion, we may state that the cognitive notion of Directionality finds its linguistic representation as the Directional type of lexical aspect with two possible manifestations: Determinate and Indeterminate Aktionsarten. This cognitive category in some languages has a morphological representation while in others, such as English, it exists as a latent, or covert category, i.e. a category included into the general semantics of verbs as a possibility with no special morphological expression except for some cases where the semantics of these Aktionsarten is included into the general lexical meaning of the verbs, such as in *begin - start*,

do - make, or this semantics is rendered periphrastically by such constructions as *take a walk - have a walk*, *take a drink - have a drink* etc.

3.2.4 The fourth stage. Manner of Occurrence.

Once the observer (the thinking subject) has established the occurrence of the event and, possibly, perceived movement, the next stage would constitute realisation of a difference in occurrence. This realisation is achieved through the operation of particularisation of the previously achieved cognitive concept of indeterminate movement which is the basis for a new stage in event-image development. Within the same perceptive act (i.e. uninterrupted perception with no participation of memory) an event may occur constantly, intermittently, or as a single point-like occurrence. As we presume that at the fourth stage there is no realisation of distance or time, this image must be purely two-dimensional. A visual analogy can be suggested when light is perceived as a flash, as a steady shining or as a series of blinks. Hearing perception may also clearly distinguish between the three different manners of occurrence (*bang-noise-rattle*). There can be also be found a bodily perception of one's involuntary movements occurring in different ways (*burp-sweat-shiver*).

The essence of the cognitive features of the manner of occurrence, consequently, is the realisation of differences between the perceptions. Another interpretation may involve the notion of quantity: indiscriminate, one, many. This latter interpretation seems to have a direct connection with Guillaume's idea of the binary tensor (see 1.1). The realisation of the event in its uninterrupted occurrence is the first interception in the development of the thought. The second interception

occurs after a certain amount of operative time at which point it is possible to distinguish between uninterrupted occurrence and punctual occurrence. This operation is in fact a clear example of particularisation described by Guillaume (1984:53-55). The narrowing movement of particularisation narrows the uninterrupted perception of an event (left field in Figure 19) to the single punctual occurrence. The continuing movement of thought past the point of the Punctual occurrence, the widening movement in this case, will result in the generalising percept of a mass of identical single perceptive occurrences (right field in Figure 19).

Of these three manners in which the occurrence of the event may be perceived only one is necessarily present in the event image. The first manner of occurrence will be further in the paper referred to as *Uninterrupted* occurrence, the second manner of occurrence will be referred to as *Punctual* occurrence, and the third manner of occurrence will be referred to as *Repetitive* occurrence. Uninterrupted, Punctual and Repetitive occurrences are the features an event image can acquire at the fourth stage of its development.

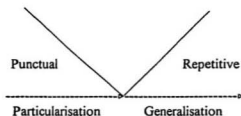


Figure 19. Punctual and Repetitive Occurrence.

The feature *Uninterrupted* occurrence represents an indiscriminate event, an event ever present in perception, i.e. an event whose occurrence is perceived throughout the whole perceptive act, as in (47a) where the plus denotes the presence of perception. As has been noticed above,

this is a most natural occurrence for static events. This cognitive feature serves as the basis for the two operations resulting in the particularisation of the punctual occurrence and in the generalisation of the repetitive occurrence.

The feature *Punctual* occurrence represents a single event, an event that influences the perceptive organs being immediately preceded and followed by the lack of perception (of the same event), as in (47b) where the plus denotes the presence of the perception of the occurrence and the minus represents the absence of occurrence:

The feature *Repetitive* occurrence (47c) denotes a perceptive event as an interrupted sequence of analogous repeating perceptions, i.e. the image of an event which intermittently is present and absent in perception.

- (47) a. ++++++ shine, weep, bleed
 b. -----+----- flash, bang, burp
 c. - + - + - + - + - shimmer, shake, roar

3.2.4.1 Linguistic representation of Manner of Occurrence - the *Geschehensarten*.

The cognitive category of the manner of the event's occurrence creates the next type of lexical aspect. This occurrence, as stated above, can be perceived as uninterrupted and indiscriminate, as single and punctual disappearing from perception/observation, and as a succession of disappearing occurrences. The type of *Aktionsarten* corresponding to the manner of event occurrence will be referred to as *Geschehensarten*. The term is rather long but the meaning

of the German word *geschehen* 'happen, occur' may be used in order to demonstrate a subordination and hierarchy of aspectual distinctions covered by the general term Aktionsarten, as well as to underscore that they are linguistic representations of the cognitive features of Manner of Occurrence of the event. Thus Geschehensarten, or the way an event may occur, have three forms, or varieties corresponding to the three cognitive features. Geschehensarten contrast the Directional and the Inherent as certain *types* of Aktionsarten.

Indiscriminate Aktionsart corresponds to the feature of uninterrupted or indiscriminate occurrence, as in (48a).

Semelfactive Aktionsart corresponds to the feature of a punctual occurrence (48b).

Iterative Aktionsart corresponds to the feature of multiple or repetitive event occurrences (48c). (Cf. Forsyth's examples in (30) where *I wrote him a letter* represents Semelfactive lexical aspect, *He wrote a letter every week* is a representation of Iterative in its Habitual variety discussed below (3.2.4.2), and *While I wrote he read* represents the Indiscriminate lexical aspect).

- (48) a. I *know* this person well.
 b. I *knew* he was a crook the moment I saw him.
 c. I *know* a good worker the moment I see him/her.

It may be argued that in (48) and in the examples provided by Forsyth it is the lexical components of the phrase such as *the moment I see, every week, while* that create the impression of a punctual, indiscriminate or iterative occurrence. One can not deny, though, that English verbs may represent those meanings in particular contexts whereas in other languages a

morphologically marked (i.e. a different) verb form might be required.

In most cases the very name of the of event (i.e. a verb out of context as a unit of lexicon) may already carry one of the three cognitive features, as in (49).

- (49) a. *live* - Indiscriminate Aktionsart
b. *hit* - Semelfactive Aktionsart
c. *hammer* - Iterative Aktionsart

In other cases, when put into a particular context, the same verbs may have a different kind of lexical aspect, as in the examples below where normally indiscriminate *live* and semelfactive *hit* can be attributed iterative interpretation:

- (50) a. Every summer John *lives* in his country house
b. During the altercation the suspect *was hitting* the victim

It might be admitted that most English verbs are not inherently marked for *Geschehensart*. The verb *fall*, for instance, “can be used as a punctual (‘fall off a ledge’, the moment of losing balance) or as a durative (‘while he was falling through the air the people screamed continuously’) or as an accomplishment (‘fell to the ground’)” (Anderson 1982:258).

The verb *to fall* in Anderson’s examples, unfortunately, is given in different forms, and some of them have in fact a combination of lexical and morphological aspectual meanings (*was falling*). The message, nevertheless, is clear: compared to the Inherent (which is always present

in the English verb), all three kinds of *Geschehensart* are not necessarily included in the semantics of the verb. They allow considerable variation even within the same lexeme (see 48a-c) which may depend on the context. It appears that practically any event can have any *Geschehensart* for specific purposes of representation.

Slavic languages have developed a complex structure of suffixed and prefixed morphemes which change the *Geschehensart* of the verb root. *Geschehensart*-changing morphemes are regular morphological means representing the cognitive category of the Manner of Occurrence (see 6.3.4). Turkic languages also have morphological means which change the *Geschehensart* of verbs. The suffix *-qala/-kälä-* common to all Turkic languages (Serebrennikov 1988:439) changes the verb into iterative, cf. Chuvash examples (51):

- (51) a. *çыр /çyt/* 'write' - *чыркала /çyrkala/* 'write now and again' (cf. Rus. *пописывать*)
 b. *вула /vula/* 'read' - *вулакала /vulakala/* 'read now and again' (Rus. *почитывать*)
 c. *сик /sik/* 'jump' - *сиккеле /sikkele/* 'hop, bob up and down' (Rus. *попрыгивать*)

The existence of only one *Geschehensart*-changing affix suggests that Chuvash verbs are inherently, in the lexicon, mentally marked for the other two lexical aspects, i.e. that they serve to represent either uninterrupted occurrence, as in *read*, or a punctual occurrence, as in *jump*. Another possibility is that the majority of the verbs are not marked for *Geschehensart* in the lexicon, and acquire one of its meanings in discourse.

In other languages, e.g. in English, *Geschehensarten* exist in the general semantics of

the verb as a potentiality and can be revealed and analysed in particular contexts of their usage.

There is an important question in connection with *Geschehensarten*, i.e. the linguistic representation of the cognitive feature of Manner of Occurrence of the event. The question concerns the further development of Iterative Aktionsart when cognition involves memory alongside with perception. These issues are addressed in the following sections.

3.2.4.2 Habituality as a semantic extension of Iterativity.

The second issue connected to the linguistic representation of the *Geschehensarten* is the relationship which exists between the categories of *Iterative* and *Habitual*. We stated in 3.2.4 that Iterative lexical aspect reflects the perception of the event as an intermittent occurrence within the same perceptive act. Perception, however, is not the only cognitive process which participates in the creation of an event image. As perceptive acts succeed one other, with every preceding act stored in the memory, a sequence of similar occurrences *separated in time* may come to be realised as one repetitive event. In other words, the memory of similar perceptive events may be realised as a single succession of repetitive occurrences. This results in the notion of Habituality which can be treated as a particular case of iterativity, i.e. iterativity distributed in time throughout different perceptive acts. Due to the participation of memory, the category of Habituality is normally restricted to the representation of past events, events whose image is stored in the memory. For that reason English is able to employ different means to express pure iterativity (*Chris kept on shouting insults at her husband*), i.e. a repetitive event within one perceptive act, and habituality (*Chris used to shout insults at her husband*) when the

occurrence of the event belongs to different perceptive acts, cf. the category **HABITUAL** and **HABITUAL-PAST**, i.e. habitual sentences with past time reference not analysable as consisting of **HABITUAL** or **HABITUAL GENERIC** combined with a regular past tense in Dahl 1985:96-102.

Our interpretation of habituality is based on the idea that it is different from iterativity in the cognitive mechanism that leads to their emergence. This understanding is close to the view of Comrie who states that “if a situation is repeated a limited number of times, then all of these instances of the situation can be viewed as a single situation, albeit with internal form” (Comrie 1976:27).

We can consequently conclude that habituality might be treated as a case of iterativity keeping in mind that it involves memory in representing a succession of separated but similar occurrences.

In concluding this section we can state that the cognitive category of **Manner of Occurrence** has a linguistic representation in the category of the *Geschehensarten*, types of aspectual distinctions which exist in one of the three manifestations: *Indiscriminate*, *Semelfactive*, and *Iterative*. These lexical aspects are mutually exclusive, so that any given verb may only have one of them, even though the same verb may have a different lexical aspect when used in different contexts.

3.2.5 The fifth stage: Predicativity (positions of the subject of the event).

The fourth step in the pre-chronogenetic stage of the event-image development is the realisation that the event may involve a subject. As we are now concerned with a cognitive

image of the event, its subject is consequently not the same as the grammatical subject. The subject of the event is treated as a separate yet integral part of the event, something which may be presented as a vast AGENT/THEME with no specification of a thematic role such as Agent, Patient, Experiencer or Instrument (cf. two-word sentences in child language).

The nature of this cognitive process is similar to the first step where the perceiving subject realises the existence of the event outside the perceiver's self. In the fifth stage the subject perceiving the event comes to the realisation that the event may have its own subject. This realisation in fact is very analogous to the first step and follows the same pattern of alienation, or separation, compare:

- (52) a. perceiving subject ----> perception (perceiving subject) + event
 b. perceived event -----> pivot (subject of the event) + event

In order to avoid confusion we will use the term *pivot* instead of 'the subject of the event' for a cognitive notion, as the term 'subject' has been too closely associated with the idea of the grammatical subject. The pivot is something different: it covers the notion of grammatical subject but is much wider as it is the property of all non-functional words. This idea stems directly from Guillaumean teaching:

Guillaume (1984:120ff) shows that all substantives, adjectives, adverbs and verbs are inherently predicative because they bring to mind a lexical notion which has to be said about something in order for the word to perform its function in discourse. Indeed, as Valin (1981:6-7) points out, any act of language must fulfil the basic condition of saying something about someone or something. The 'something' which is said is called by Guillaume an 'import of meaning' (1984:120-

2) and corresponds on the linguistic level to the lexeme or non-grammatical part of the word's meaning. The 'something' about which the lexeme is said, that to which the lexeme is incident, is called by Guillaume the 'support'; it forms part of the grammatical make-up of certain words, corresponding on the formal level to the category of person (Duffley 1992:119).

Duffley arrives at the conclusion that "a support or person is also present in the infinitival form of the verb, even though the latter can neither be predicated grammatically of a subject nor take any personal endings" (Duffley 1992:121). Duffley's conclusion about the infinitive is equally true of any other non-functional word. The 'something' the word says about, the support is the second element of the event image at this cognitive stage. It is the pivot of the event, and it is by no means restricted to the notion of person.

The linguistic representations of the pivot may vary. On the cognitive level the pivot remains unassociated with specific syntactico-semantic roles, i.e. it may be the grammatical subject of either passive, active or medio-passive sentences, or it may be present in other forms related to the lexical item(s) denoting the whole of the event but its subject, as in the following examples suggested by Hewson (personal communication):

- (53) a. *my* washing the shirt
b. the washing of *the shirt*
c. *Napoleon's* defeat of the Prussians at Jena
d. the *Prussians'* defeat at Jena
e. the shooting of *the hunters*

where the pivot is italicized. The realisation of the pivot does not necessarily have to be

morphologically expressed, as in *To be or not to be* where the event of being implicitly presupposes some subject whose property of being is being questioned. What is at issue here, however, is the separation of two entities - the event and its pivot. The term 'subject of the event' will subsequently be used to denote the pivot of verbal forms.

We can analyse the cognitive mechanism underlying this realisation using the same binary tensor with the particularising operation carving out the pivot. This process signifies greater involvement of the perceiving subject into the realisation of the surrounding reality. Note, however, that the event by this stage has already a number of features, such as Occurrence, Stasis or Kinesis, Manner of Occurrence, and the new feature should be incorporated into the mental image. This is illustrated in (54) where the subject of the event is denoted by a small letter 's' inside a circle, and the representations of the event follow the representations of (47):

- (54)
- a. ++++++++Ⓢ+++++++
 - b. -----+Ⓢ-----
 - c. - + - + - Ⓢ + - + - +

At this stage of event-image development the position of the pivot either in front of or behind the event in (54b) is irrelevant in the absence of the notion of time though very soon these positions will make crucial distinctions. What is important is that the pivot may be viewed either as being part of the event, being inside it, or being a separate entity outside the event. This cognitive distinction between the subject inside and outside the event must have an important

implication for linguistic representations.

3.2.5.1 Linguistic representations of the position of the pivot - the Perspective.

The mental separation of the event and its pivot results in the immediate realisation of the pivot's position relative to the event as either inclusive or exclusive. The linguistic representation of these positions of the subject relative to the event are achieved in the morphological or latent categories of Perfective Aktionsart and Imperfective Aktionsart which will be referred to generically as the Perspective.

It might be argued that the Perspective is not necessarily the property of verbs alone. It may be suggested that nouns may also have some of the lexical aspectual distinctions (compare *His shooting was good* and *His shot was good*). This topic, unfortunately, has not been thoroughly investigated in linguistics, and Comrie gives cautious suppositions concerning the possibility for nouns to have aspects (Comrie 1976:40fn. referring to Seuren 1974:4).

Imperfective Aktionsart conveys the notion of the pivot which is incorporated into the event. The pivot (subject of the event) is perceived as a specific entity yet being a part of the whole event. It correlates to the cognitive image of *Internal* subject (54 a,c).

Perfective Aktionsart places the pivot outside the event, externalises him/her/it. It conveys the notion of the pivot being connected to the event yet separated from it (54b). English does not have a morphological category that corresponds to these two lexical aspects. Nevertheless, their existence is clearly perceived in the so-called inclusive and exclusive usages of some non-finite verb forms.

In the following examples (55a) shows an external pivot, i.e. conveys the meaning of Perfective Aktionsart when the subject of the event is externalised and viewed outside the event. On the other hand, (55b) shows an internal pivot, i.e. conveys the meaning of the Imperfective Aktionsart:

- (55) a. I saw *him* cross the street
 b. I saw *him* crossing the street

English also employs periphrastic constructions to render the meaning of the Perfective. According to Sapir (1949[1931]:114), constructions like *have a swim/sip/look* can be viewed as analogues to the Perfective. Similar semantics is rendered by the expressions with the verb *take*.

The representations of the Perspective in Turkic languages also involves periphrastic constructions: certain participles (marked in Chuvash with *-sa/-se*) can combine with the finite forms of auxiliary verbs which get desemanticized and express a purely aspectual meaning. For example, in Chuvash the verb *яп/яр/* 'let, release, send' can be regularly used to denote the completion, or totality of the action (56), and the verb *мăп/тăр/* 'stand' can be used to denote incomplete, ongoing action in the typical meanings of the imperfective, i.e. durativity and repetitiveness (57) (examples from Andreev 1966:55):

- (56) a. *çи /çi/* 'eat' *çи-се яр /çise yar/* 'eat up' (cf. Rus. *съесть^{pf}*)
 b. *кул /kul/* 'laugh' *кул-са яр /kulsа yar/* 'give a laugh' (cf. Rus. *рассмеяться^{pf}*)

- (57) a. *çiç /çiç/* 'flash' *çiç-ce tăr /çiçse tăr/* 'shine', 'glimmer' (cf. Rus. сверкать^{imp})
 b. *кил /kil/* 'come' *кил-ех тăr /kilex tăr/* 'keep on coming' (cf. Rus. приходит^{imp})

Slavic languages have developed the distinctions of these two subspects to the full capacity making it a regular morphological and semantic feature. We shall return to the status of this kind of aspectual distinctions in Slavic languages in Chapter Six. In English the category of the Perspective remains at the lexical level and is revealed or could be inferred from the contextual usage of the verbal forms.

The solution proposed above is based on established views. Comrie, for example, notes that "the perfective looks at the situation from outside, without necessarily distinguishing any of the internal structure of the situation, whereas the imperfective looks at the situation from inside" (1976:12). According to Gasparov, "the use of perfective projects a world view according to which a person assumes the position of an external observer who is not immediately involved in the processes he describes in his message" (Gasparov 1990:194). Gasparov adds that "on the other hand, by choosing imperfective, the speaker places himself, as it were, inside the very course of the described process. The external boundaries of the process are lost from the perspective" (Gasparov 1990:195). Note that both Comrie's "situation" and Gasparov's "process" correspond to our usage of the term "event".

The problem with the above definitions is the identification of the subject of the event as the speaker which is possible in the first person indicative forms; the semantics of the Perspective, however, is present in all verbal forms, both finite and non-finite, in those languages that have its morphological expression.

This problem is solved in Guillaumean linguistics where the perceiving subject and the perceived subject of the event (pivot) are separated. Valin calls the perception of the event from within “endotropic” view, and the view from outside/without - an “exotropic” one (Valin 1975:141; Hirtle 1975:53). It is the perceiving subject’s realisation (localisation) of the perceived pivot either inside it or outside it that correlates with the linguistic notions of Imperfective and Perfective correspondingly.

Our interpretation of the Perspective suggests that the semantics of totality, completeness, wholeness of the perfective aspect is a semantic expansion and a case of its general and primary semantics of viewing the pivot outside the event. The ideas that the perfective “represents the action collectively, as a whole, in sum, in compact form” (Chernyi 1876:11 quoted by Bondarko 1991:76), an action as a whole - “the beginning, the middle, and the end, all in one” (Razmusen 1891:379 quoted by Bondarko 1991:76) and that the Perfective “denotes a situation viewed in its entirety, without regard to internal temporal consistency” (Comrie 1976:12) are true for a great number of the Perfective usages. But such statements are not always true, and do not apply to a number of verb classes, e.g., in Russian. The above expositions of the Perfective, for instance, are difficult to apply to “perfectives such as *засмеялся* ‘he laughed’ (or ‘began to laugh’) without resorting to somewhat tortuous logic to explain that here what is ‘completed’ is ‘the beginning of the action’” (Forsyth 1970:2). The explanation of this form as a combination (cumulation) of lexical aspects comprising the Perfective and the Inceptive kind of aspect is non-contradictory and stresses the primary semantic meaning of the subject of the event outside the event.

3.2.5.2 The Perspective and the previous features of the event-image.

In the previous section we have stated that imperfective Aktionsart generalises and unites the aspectual distinctions of the Manner of Occurrence, namely, the Indiscriminate and Iterative Geschehensarten. It is not surprising, therefore, that the imperfective aspect in Slavic languages has the above two meanings blended in any verbal form, and most descriptions of the imperfective morphological aspect stress this phenomenon:

Un verbe imperfectif exprime une action qui dure et se développe, soit que ce développement soit continu, soit qu'il résulte de la répétition d'un même procès (Meillet 1934:283).

The category of aspect signifies that the action expressed by the verb is presented:
a) in its process, in its accomplishment, and thus in its duration or repetition [...].
Verbs denoting durative or repetitive actions are called verbs of imperfective aspect (Istrina 1960:424) (translation mine - V.V.).

It appears that Imperfective Aktionsart may serve as a generic representation combining two Manner of Occurrence features: Indiscriminate and Repetitive occurrences. The meaning of the imperfective also does not contradict the notions of Stasis and Kinesis. We may generalise by saying that static events represented by such verbs as *know*, *be*, *exist* are necessarily imperfective whereas the inverse relationship is not necessarily true, i.e. not all imperfective events are static.

Similarly, the idea of the pivot outside the event is most suitable for the representation of the Semelfactive Geschehensart (i.e. a punctual occurrence). A punctual event taken in its totality can not include the pivot which thus becomes an external subject of the event image. We can observe the same kind of relationship between the perfective Aktionsart and the Semelfactive Geschehensart: a punctual event is necessarily perfective whereas not every perfective

event is punctual without any inner structure, cf. Russian *попрызаться*^{pf} /poprygat'/ 'to jump for some time', *нарождать*^{pf} /narožat'/ 'to give birth (to a multitude of creatures), to give many births'.

The idea of perfectivity and outside pivot does not easily combine with the notions of Stasis and Kinesis as general movement, movement at large. It might be argued that the image development at the fifth stage could take an additional little step, and the same properties can be attributed to the event taken as a whole, i.e. an external subject may be viewed as static, or kinetic. This suggestion may provide an explanation for the somewhat indiosyncratic behaviour of some Slavic perfectivising prefixes: verbs which denote an event with a kinetic (or active) subject are perfectivised by the prefix *s-* (58a,b) while verbs which denote an event with a static subject are perfectivised by the prefix *po-* (58c,d), cf. Russian:

- | | | |
|------|--|---|
| (58) | a. <i>делать</i> ^{imp} /delat'/ | <i>сделать</i> ^{pf} /sdelat'/ 'do, make' |
| | b. <i>жать</i> ^{imp} /žat'/ | <i>сжать</i> ^{pf} /sžat'/ 'reap' |
| | c. <i>читать</i> ^{imp} /čitat'/ | <i>почитать</i> ^{pf} /počitat'/ 'read' |
| | d. <i>лежать</i> ^{imp} /ležat'/ | <i>полежать</i> ^{pf} /poležat'/ 'lie' |

This claim, i.e. that the pivot separated from the event may be viewed as static or kinetic, is challenged in Chapter Six where alternative explanations are provided in terms of the meanings of the Directional type of lexical aspect, i.e. the Determinate and the Indeterminate.

Summing up the discussion, we can say that the fifth stage of the event-image development is characterised by the emergence of the notion *pivot* (*subject of the event* in the case of verbs)

and is accompanied by the features of Occurrence, Manner of Occurrence (Uninterrupted, Punctual or Repetitive) and may be accompanied by Directionality features (movement as either Determinate or Indeterminate) and those of Stasis/Kinesis. The pivot (subject of the event), due to the manner of the occurrence, can either be located inside the event (usually in uninterrupted and repetitive occurrences) or outside the event (normally, in the case of the punctual occurrence of the event). These two positions of the subject may be termed *Internal* and *External* positions of the pivot relative to the event, and will be presumed to be features of the event image. Unlike the features of the kinetic stage, the features *Internal* and *External* appear to be obligatory for the event image.

An important comment should be made at this point in order to underscore the difference of the distinction between the *Internal* and the *External* positions of the pivot (subject of the event) and the orientation of the pivot relative to the event (the five possible positions of chronogenetic aspects discussed above, see also Figure 9 reproduced on page 112). The major difference is that the chronogenetic positions involve the linear orientation of the subject relative to the event which has the feature of Event Time. The external or internal positions may be distinguished in the event which does not yet have Event Time, and there is no linearity in the representation of both the event and its subject.

3.2.6 The sixth stage. Transition to Chronogenesis: Beginning and End.

The next stage in the development of the event image should involve the idea of duration, or the event's beginning or end. These concepts could not have appeared earlier because in

order to have duration, or length, one must have a starting point, a system of coordinates to measure the duration against. It is apparently the step at which the event acquires all the necessary features in order to enter chronogenesis. In fact, the graphic representation has been provided by Hewson in Figure 9 (reproduced below), and it clearly indicates that the event has duration.

A|B-----C-----D|E

Figure 9. Positions of the subject of the event.

The idea of the duration must necessarily be preceded by the idea of the beginning or end, the two boundaries that contain duration. This is illustrated in (59) where the square brackets symbolise the beginning (a, b) and the end (c, d) of the event:

- (59)
- a. -----[+++++++]
 - b. -----[+ - + - + - + -]
 - c. ++++++]-----
 - d. + - + - + - +]-----

The cognitive essence of the notions of the Beginning and End, or temporal boundaries, can be explained rather simply in the realisation of the presence and absence of perception in operative time (beginning and end are spelt with small letters in a non-terminological sense, and with capital letters to indicate the mental image). The absence of perception, consequently, of the occurrence of the event, is represented in (59) by minuses.

The emergence of the notions of Beginning and End must be a necessary prerequisite for the emergence of the notion of Event Time which is viewed as time *contained* within an event. Something contained can only be realised if the notion of the *container*, or the borders limiting something, are developed. It seems logical to suggest that these notions are created through the same mechanism of the *binary tensor* with particularising movement resulting in the notion of End of perception (and, consequently, the realisation of the end of occurrence of the event), and the subsequent generalising movement producing the notion of Beginning, as in Figure 20.



Figure 20.

The above representation may seem to defy common sense by proclaiming the priority of the notion of End over that of Beginning. The universality of Guillaume's binary tensor, however, may account for that seeming contradiction. The binary tensor in Figure 20 represents a threshold between two non-homogeneous operations: particularisation and generalisation. In order for the generalisation to begin, the previous operation must be over, come to its end, terminate. In any case of change, the beginning of something new should be preceded by the cancellation of the previous state. The bell which signals the beginning of a break at school first signals the end of the lesson. The dawn of a new day must be preceded by the end of the

night. An occurrence of the event can only begin after non-occurrence ends. It appears that at any threshold it is necessarily the end that should occur first thus allowing the beginning to happen.

Our daily cognitive experience oftentimes allows us to perceive both the beginning and the end of certain events. There is no denying, however, that we can witness only either the beginning or the end of certain events. Thus we can see the demolition of a hundred-year-old building, its termination though we were not even born to see the building being built. We may plant a tree and witness its beginning in a new place, and it may take generations to witness the end of the tree.

It is obvious that the beginning and the end of a punctual event are difficult to represent. Indeed, if the event is punctual and corresponds to a one-dimensional point, it can have neither a beginning nor an end, and is perceived in the totality of its occurrence. However, the established cognitive realisation of Beginning and End may theoretically provide the same attributes to a punctual event which in this case would be viewed in its totality which contains duration, a minimal quantum of time, however small it might be (i.e. Event Time as described in Chapter 1). This might happen when the subject of the event and the event are presented in a linear, or successive way. An orientation of the subject of the event either *before* or *after* would allow for its perception as an indivisible whole as well as for having two opposing ends (i.e. Beginning and End).

It should be noted that the representation above (59) does not show the pivot (subject of the event). Locating the pivot on either side of such an incomplete event image may create

interesting mental images. These images are not explored here as they are covered mostly by the chronogenetic aspects as described in Chapter One.

One of the most important implications of this stage of the pre-chronogenetic development of the event image is the fact that it permits the open-ended representation of events as having either Beginning or End without either presupposing the other. This implication could be further explored in the analysis of the Inceptive and Egressive kinds of aspect.

The idea of the duration (event after the beginning or before the end) immediately entails the notion of relative duration. The former distinctions of the Manner of Occurrence (Punctual, Indiscriminate and Repetitive) may now have the following representation (Figure 21):

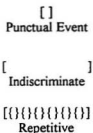


Figure 21. Manners of Occurrence.

3.2.6.1 Linguistic representation of Beginning and End.

The realisation of the beginning and the end of the event precedes the emergence of the concept of Event Time described by Guillaume. It constitutes a transitional stage on the threshold of the first stage of chronogenesis discussed in detail in section 1.2. Once the event

image acquires the concept/feature of duration, or Event Time, it may be immediately combined with the previously emerged features and be open to proceed in the chronogenesis to the five theoretically possible aspects which reflect the position of the subject relative to the event (see 1.2 and Figure 9), namely Retrospective, Inceptive, Progressive etc.

As noted in 3.2.6, the operation of particularisation may lead to the realisation of the event's termination (disappearance from perception) whereas the operation of generalisation may lead to the awareness of beginning. It thus seems feasible to assume a theoretical possibility for the event image to have only one boundary in Event Time, i.e. either the end or the beginning, as in Figure 19. In Figure 22, S stands for the pivot (subject of the event), B stands for the beginning of the event, and E stands for the end.

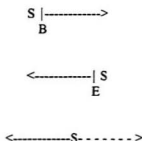


Figure 22. Subject of the event and Event Time.

The topmost arrow in Figure 22 indicates the subject in the position before the event's beginning with no end in sight, as in (60):

(60) a. *I will be* a good boy.

- b. The baby *is starting to walk*.

The middle arrow in Figure 22 indicates the subject in the position after the event's end while the beginning of the event may be missing in the perception, as in (61a), or it may be indicated by other language means, i.e. lexically (61b,c):

- (61) a. I *have been* a good boy (I *have never read* Joyce)
 b. I *have been* here since 8 a.m.
 c. I *have finished writing* my paper.

The bottom arrow in Figure 22 shows the subject in the middle of the event with no reference to the event's end or beginning, as in (62):

- (62) You are being nasty (Are you being silly?)

In Chuvash the notional categories of the Beginning and the End are rendered periphrastically by means of a *sa*-participle and a finite form of the verbs which denote reaching a certain limit, as in (63) from Reziukov 1959:143.

- (63) a. *юкса пĕт /juxsa pĕt/* 'flow out, run dry'
 from *юх /jux/* 'flow' and *пĕт /pĕt/* 'end, be over'

b. каласа пѣтер /kalasa pēter/ 'finish saying'

from *каля* /kala/ 'speak' and *пѣтер* /pēter/ 'finish'

c. ёчлесе чѣтер /ēčlese čīter/ 'complete work, finish working'

from *ёчле* /ēčle/ 'work' and *чѣтер* /čīter/ 'bring to the limit'

Slavic languages have morphological means to indicate the end or the beginning stage of the event represented by the verb. In Russian, for example, the prefixes *za-* and *po-* are used to denote the starting of the event, its beginning (64a,b), and the prefix *do-* is used to denote the end (64c,d). The prefixes correspond to the prepositions existing in the language: *za* means 'behind, beyond some limit', and *do* means 'up to (some point)'. Apparently, these spatial notions have been re-interpreted in temporal terms, so that an event is presented 'beyond its beginning' and 'approaching its end' respectively (for detailed treatment of spatial and temporal reference of prefixes see Chapter Five).

- (64)
- | | |
|--------------------------|--|
| a. петь /pet'/ 'sing' | запеть /zapet'/ 'start singing' |
| b. нести /nesti/ 'carry' | понести /ponesti/ 'start carrying' |
| c. петь /pet'/ 'sing' | допеть /dopet'/ 'sing up to the end' |
| d. нести /nesti/ 'carry' | донести /donesti/ 'carry up to the point' (also: 'snitch, report on somebody') |

As was the case with the previous stages of event image development, the cognitive notions of Beginning and End interact with the features acquired by the event image earlier.

This imposes some restrictions and creates various semantic effects. For example, the *Geschehensart* (Manner of Occurrence) ‘Semelfactive’ denotes a punctual, momentary event taken in its totality, such as *hop*. It does not normally combine with an idea of either Beginning or End. So when a verb with a Semelfactive lexical aspect is combined with these notions, the resulting image presupposes iterativity as in (65a). In Russian, verbs marked for the Semelfactive Aktionsart can not combine with the prefixes *za-* or *po-* which denote the beginning of the event as in (65b) where the verbs are marked for punctual occurrence by the suffix *-nu-*. However, if the verb represents an event which has an Iterative or Indiscriminate *Geschehensart* (i.e. Manner of Occurrence feature), the usage of the prefixes is quite normal (65c,d):

- (65) a. Chris *started hitting* the ball.
 b. крикнуть^{pf} /kɾiknut’/ ‘shout, give a shout’ - *закрикнуть - *покрикнуть
 c. кричать^{imp} /kɾičat’/ ‘shout (long)’ - закричать^{pf} /zakɾičat’/ ‘shout out, start shouting’
 d. крикивать^{imp} /kɾikivat’/ ‘shout (intermittently)’ - вскрикивать^{imp} /vskɾikivat’/ ‘to utter intermittent shouts, to cry now and again’

The special status of the cognitive features of Beginning and End, their transitional character on the way to chronogenesis puts them somewhat apart from the other features that create Aktionsarten. We might postulate that Beginning and End belong to the chronogenetic level rather than to a pre-chronogenetic stage at which the other aspectual distinctions emerge. The transitional character of these two features might account for the absence of their morphological representation in English where they are for the most part expressed lexically (*finishing up*).

On the other hand, evidence from Russian where verbs may carry an inchoative or terminative meaning in any of their forms, i.e. both finite and non-finite, suggests that these meanings may constitute lexical semantics and consequently belong to the category of Aktionsarten.

3.3 The system of lexical aspects.

3.3.1 Aktionsarten as a system.

The description of Aktionsarten and the mechanisms of their emergence presuppose a stratified and hierarchical organisation. The emergence of each new type of lexical distinction is ensured and facilitated by the features of the preceding stage of the event-image development. These features serve as the material basis for the next operations of particulation and generalisation. The whole development may be viewed as a succession of binary tensors creating semantic aspectual dimensions.

The Aktionsarten corresponding to the cognitive features of the event image are Stative vs Non-Stative, Determinate vs Indeterminate, Indiscriminate vs Semelfactive vs Iterative, Perfective vs Imperfective. This description does not include two more semantic features - the Inherent and the Beginning/End. The notion of Inherent Aktionsart, i.e. the lexical function of identifying an event, is the basis for the string of the binary tensors and it appears in the result of the mental separation of the perceiving subject and the perceived event. The second semantic feature not represented here is the cognitive notion of Beginning and End. Though it may be argued that they are conditioned by the idea of Imperfectivity which implies some sort of duration, these two notions seem to belong to the chronogenetic level and may constitute a transitional

stage to the first chronothesis described by Guillaume and the cognitive substance for the development of the notion of Event Time.

One of the consequences of presenting Aktionsarten as a string of binary tensors which open new semantic dimensions is the realisation that verbs as representations of the event image need not necessarily have all the features in their lexical semantics. Thus, stative verbs such as *know*, *exist*, *want* that are mentally marked for Stasis may not have any other of the features such as determinate or indeterminate. These verbs may only have the Uninterrupted feature of Manner of Occurrence, and consequently belong to the class of imperfective verbs representing an Internal subject.

Similarly, non-stative verbs such as *sleep*, *sit*, *learn* may be unmarked for the directionality of movement and consequently lack the features determinate or indeterminate movement, thus skipping the stage in event-image development which leads to the emergence of the Directional lexical aspect. It appears that kinetic verbs representing movement at large are most likely to combine with the feature of Internal subject as well, which results in their being imperfective.

3.3.2 Spatial Aktionsarten.

Besides the Aktionsarten which were described above and which are believed to comprise the pre-chronogenetic stage of image development, languages may have special means which locate the event in space relative to some other event or speech situations. These meanings are generally related by means of adverbs and prepositions which very often impose the idea of some limit, or end-point of the event:

L'adjonction d'un préverbe à un verbe tend à donner à ce verbe un aspect "déterminé": lat. *ad-uenīre* "arriver" est tout autre chose que *uenīre* "venir"; la considération du terme du procès intervient (Meillet 1934:291).

Spatial Aktionsarten can be illustrated by such verbal collocations as *bring out*, *come in*, *climb up*, *fall down* etc. in which the event gets some additional specification or localisation. Slavic languages employ prefixes which are directly related to the semantics of the corresponding prepositions (see Chapter Five). Turkic languages use periphrastic constructions with the verb identifying the event in the form of the participle and the finite form of an auxiliary, usually a verb denoting some kind of movement, as in the following examples from Chuvash:

- (66) a. сиксе ан /sikse an/ 'jump off' from ан /an/ 'descend' and сик /sik/ 'jump'
 b. сиксе тух /sikse tux/ 'jump out' from тух /tux/ 'exit' and сик /sik/ 'jump'
 c. туртса ил /turtsa il/ 'take away' from ил /il/ 'take' and турт /turt/ 'pull'

Almost universally in various languages, spatial specification results in semantic re-interpretation of the event, so that the modified verb may ultimately denote a different event compared to the unmodified verb (e.g. *The baggage was brought down* versus *The verdict was brought down*). Besides these developments, adverbs and prepositions may get detached from their spatial semantics and may be used for a temporal localisation of the event by interplaying with both pre-chronogenetic and chronogenetic features. In Chapter Six we will analyse the abstraction of spatial semantics which may be employed for aspectual modifications concerning Event Time and Universe Time.

3.4 Summary of the pre-chronogenetic level.

The preceding theorising on the image of the event entering chronogenesis has revealed at least five features which the event-image acquires in consecutive steps. At the first stage of perception the perceiving subject distances him/herself from the event which acquires an independent notion of *Occurrence*. The linguistic representation of this feature has been called *the Inherent* lexical aspect.

The second stage allows some event images to acquire yet another feature: the concept of movement, or *Kinesis* which brings the idea of motion and leads to distinguishing between static entities and kinetic entities. This cognitive distinction results in the linguistic notions of *Stative* and *Non-Stative* lexical aspects.

The third stage involves the development of the idea of Kinesis. Kinetic events could be either unordered and chaotic (resulting in the category of indeterminate movement) or they can be orderly and pursue a certain direction (resulting in the category of determinate movement). Their linguistic representation is the category of *the Directional* lexical aspect with two possible manifestations (*Determinate and Indeterminate*).

The fourth stage involves the *manner* in which occurrence goes on - either as a single event terminated in perception, as an event going through the whole of perception or as a sequence of interrupted occurrences. These three Manner of Occurrence features (*Uninterrupted, Punctual, and Repetitive*) have a linguistic representation in the kind of a lexical aspect called in the paper *Geschehensarten* (*Indiscriminate, Semelfactive and Iterative*).

These cognitive features lay the foundation for the further development of the event

image, with the next stage separating the event from the *pivot*, or *subject of the event*. The process results in the idea that the event can contain the pivot as its part (*Internal*) or the subject may be outside the event (*External*). The linguistic correspondence is the *Perspective* type of lexical aspect with the *Perfective* carrying the idea of the external pivot, and the *Imperfective* carrying the notion of the internal pivot.

The final step of the pre-chronogenetic stage of event-image development might be the emergence of the concepts of *Beginning* and *End* which serve as a necessary prerequisite for the process of chronogenesis and the notion of Event Time. The previous stage, i.e. the emergence of the category of pivot is the basis for the development of the notion of duration, or Event Time as the pivot becomes the starting point, the background on which the movement is perceived as having length, or duration. This stage might also be considered as a transitional stage, or the initial stage of chronogenesis providing a linear representation of the event and the pivot and thus ensuring the development of chronogenetic stages.

These features are exclusively mental constructs. My hypothesis is that they represent different interceptions that the mind makes in producing an image of an event. Some of them may have a direct morphological correspondence in language. Others may be included into the semantic potential of certain lexemes.

Table 3.1 below summarizes the cognitive stages and features and the corresponding types and kinds of Aktionsarten.

The following chapters will attempt to provide the description of how different aspectual distinctions interact in the verbal system of Russian. The analysis begins with a brief discussion

of the aspectual system in Old Church Slavic (Chapter Four) which will provide some historic outlook on the problems to be discussed. This is followed by an analysis of the functioning of prefixes which play a fundamental role in creating aspectual distinctions in Russian (Chapter Five). Finally, Chapter Six provides an overview of the subsystems of aspectual distinctions which can be observed in modern Russian.

Stages of the Event Image Development	<i>Cognitive features</i>	Type of Aktionsart	<i>Kinds of Aktionsart</i>
1. Occurrence	<i>Occurrence</i>	the Inherent	
2. Movement	<i>Stasis Kinesis</i>	the Kinetic	<i>Stative Non-Stative</i>
3. Directionality	<i>Determinate movement Indeterminate movem.</i>	the Directional	<i>Determinate Indeterminate</i>
4. Manner of Occurrence	<i>(Uninterrupted) Punctual Repetitive</i>	the Geschehensarten	<i>(Indiscriminate) Semelfactive Iterative</i>
5. Position of the pivot	<i>Internal External</i>	the Perspective	<i>Imperfective Perfective</i>

Table 3.1. Cognitive stages of the event-image and lexical aspects (Aktionsarten).

Chapter Four.

Tense and aspect in Old Church Slavic.

In this chapter the categories of tense (4.1), Aktionsarten and aspect (4.2) and the conjugational classes of Old Church Slavic verbs (4.3) are considered which is followed by some suggestions concerning the status and the interrelations between these categories (4.4).

4.1 Tenses in Old Church Slavic.

OCS displays a system of three synthetic (morphological) tenses and a number of analytical (periphrastic) constructions in the indicative. The synthetic tenses are traditionally called the present, the aorist and the imperfect (Leskien 1969[1871]; Mladenov 1929; Meillet 1934). These forms are referred to as aspectual forms by Bubeník (1997): the aorist is treated as a past Perfective while the present and the imperfect are treated as non-past and past Imperfectives respectively. In order to avoid confusion, the traditional terms will be used in this chapter to identify the morphological forms.

The present indicative form is marked by the so-called primary endings (Leskien 1969[1871]:117) whereas the aorist and the imperfect are marked by the secondary inflexions (see examples in Leskien 1969[1871]:118). The present and the aorist are traced back to Indo-European origins while the imperfect is generally treated as a Slavic innovation (Leskien 1969[1871]:120; Meillet 1934:271-273).

The present and the aorist were formed from two different stems called the present stem and the (aorist)-infinitive stem (Meillet 1934:202). The imperfect of different verbs was formed from either of the stems (Trubetzkoy 1968:158) (but cf. Meillet's statement: "L'imparfait appartient

au système de l'infinifit" - Meillet 1934:273).

4.1.1 The use and meaning of tenses.

The present is claimed to denote a present action with inherently (lexically) imperfective verbs and to denote future with inherently perfective verbs (Leskien 1969[1871]:172-173; Trubetzkoy 1968:156): "Thus in OCS the perfective verbs could express the future but could not express the present concept and the imperfective verbs could express the present but could not express the future" (Nandriş 1965:161).

This view is not supported by a number of linguists who state that

В старославянском языке глаголы как совершенного, так и несовершенного вида в форме настоящего времени могли иметь и значение настоящего, и значение будущего времени; это зависело от контекста, от временного плана высказывания (повествования) ["In Old Slavonic both perfective and imperfective verbs in the form of the present tense could have both the meaning of the present and the meaning of the future time; it depended on the context and the temporal background of the utterance (narration)" (Haburgaev 1974:264-265), translation mine - VV].

The *present tense* has a very wide range of meaning covering every time which is not specifically and exclusively past. It occurs with perfective and imperfective verbs; perfective verbs can not be used to denote an action as going on specifically at the time of speaking, otherwise there is no temporal difference between aspects, any meaning such as 'future' being due to the context and not to the tense or aspect (Gardiner 1984:116).

The fact that a verb denotes a future action or state is to be inferred from the context, and future action is one of the meanings of the present tense. Perfective verbs, which cannot denote action taking place at the time of speaking, very often occur with future meaning although the present of the perfective verbs is not itself a future tense. Imperfective verbs can also have future meaning (Gardiner 1984:118).

In view of the controversy surrounding the notion of lexical aspect in OCS (see 4.2), it seems reasonable to assume that the OCS present referred the event to the non-past sphere of Universe Time. In the absence of a cognitive and morphological contrast between present and future, a particular verb in a certain context could be interpreted as having either a future or a present reference from the point of view of modern linguistic analysis. The OCS data thus suggests that the form of the present marked the cognitive notion of 'non-past' only.

4.1.2 The aorist and the imperfect.

There were two synthetic forms in OCS which had a past reference: the aorist and the imperfect. The latter had a rather regular formation while the aorist was attested in three variants called the simple, or asigmatic (strong) aorist, the sigmatic aorist, and the new enlarged sigmatic aorist (Nandriş 1965:141-145) of which only the enlarged sigmatic aorist was productive (Trubetzkoy 1968:145) and tended to oust the other two (Nandriş 1965:145).

The meaning of the aorist is often described in contrast to the imperfect:

Das Imperfekt stellt den andauernden Verlauf einer Handlung in der Vergangenheit dar (es beschreibt), der Aorist konstatiert nur, daß die Handlung stattgefunden hat ["The imperfect describes an ongoing occurrence of the action in the past (it describes); the aorist states only that the action took place" (Leskien 1969[1871]:172), translation mine - VV].

L'aorist est la forme qui sert à énoncer un fait passé. Dans les plus anciens textes, c'est la forme ordinaire de prétérit, et l'on ne recourt à l'imparfait que pour exprimer la durée dans le passé, et au prétérit composé que pour exprimer l'action achevée (Meillet 1934:257-258).

В старославянских текстах аорист употреблялся для обозначения единичных, нерасчлененных действий, имевших место в прошлом и не соотносимых с настоящим. Именно поэтому аорист обычен

в повествовании, когда сообщается о последовательно сменявшихся друг друга событиях. ["In Old Slavonic texts the aorist was used to denote single uninterrupted actions which occurred in the past and are not related to the present. For that reason the aorist is common in narration when successive events are being reported" (Haburgaev 1974:268), translation mine - VV].

This is the most common tense for narration of single events taking place at some definite time in the past without reference to other events either taking place at the same time or subsequently. This tense is also used to denote the beginning or the end of the action which is itself lasting (Gardiner 1984:122)

The aorist consequently appears to have only the function of referring the action to the time sphere of the past, as much as the other synthetic past tense, namely, the imperfect.

The latter, however, is said to have an additional meaning of process(ness) and implies duration:

L'imparfait indique une action qui se développe dans le passé, appartenant presque toujours à un imparfaitif, il équivaut à l'imparfait grec (Meillet 1934:273).

This tense denotes an action that took place in the past and lasted for an indefinite time, either continuously or repeatedly. It sets the background against which the narration develops, and is in contrast with other past tenses, particularly the aorist (Gardiner 1984:123).

Формы имперфекта обычно употреблялись в старославянских текстах в тех случаях, когда необходимо было указать на действие (или состояние), совершившееся в прошлом как длительный акт, иногда повторявшийся в прошлом, включавший в себя ряд составных моментов ["The forms of the imperfect were normally used in Old Slavonic texts in those cases when it was necessary to indicate an action or state which was going on in the past as a continuous act, sometimes repeated in the past and including a number of component stages" (Haburgaev 1974:276-278), translation mine - VV].

The above considerations clearly show that the semantic opposition between the OCS aorist and the imperfect was not a contrast of time but that of aspect. One must consequently agree with Bubenik's analysis of the present and the imperfect as non-past and past Imperfective,

and his analysis of the aorist as the past Perfective (Bubenik 1997:86) which are also contrasted to analytical Retrospective past and non-past forms (traditionally called the perfect and the pluperfect and discussed below).

4.1.3 Analytical verbal forms.

Besides the inflexional forms, OCS had a number of analytical forms with the verbs *byti* 'be', *iměti* 'have', *xotěti* 'want', *vzčěti*, *načati* 'begin'. The forms with the verb 'to be' combined with the indeclinable *l*-participle of the notional verbs which was only used predicatively in compound tense forms, while the other verbs combined with the infinitive to create the so-called 'periphrastic future'.

4.1.3.1 Periphrastic future.

The verbs *iměti* 'have', *xotěti* 'want', *vzčěti*, *načati* 'begin' were used in OCS with both prefixed and unprefixed infinitives to denote a future action:

- (67)
- | | |
|------------------|---|
| a. <i>načō</i> | <i>tvoriti</i> 'I shall do' |
| begin. 1SG.PRES. | do.INF. |
| b. <i>načō</i> | <i>сѣтворити</i> 'I shall do' (Haburgaev 1974:266). |
| begin. 1SG.PRES. | do.INF. |

These constructions are considered to be future tense forms and are variously called 'periphrastic future' (*umschriebenes Futurum*) (Leskien 1969[1871]:169), 'analytical future

forms' (*analytische Futurumformen*) (Mladenov 1929:260), 'future tense' (Nandriš 1965:157), 'compound future I' (Haburgaev 1974:265-266). The semantics of the finite verbs in such constructions, however, is almost never restricted to futurity, so that *iměti* 'have' regularly implies necessity or obligation (Leskien 1969[1871]:169), *xotěti* 'want' expresses the desirability or necessity (Meillet 1934:285), and *vъcěti*, *načati* 'begin' indicate the beginning of the action (Haburgaev 1974:266).

These facts lead us to the conclusion that the periphrastic future forms with the verbs *iměti* 'have', *xotěti* 'want', *vъcěti*, *načati* 'begin' are free syntactical combinations with a modal meaning accompanied by the future reference. Consequently, such constructions fall outside the scope of the tense system on OCS.

4.1.3.2 Analytical forms with the verb *byti* 'to be'.

The verb 'to be' in OCS has two non-past forms: *jesmь* 'I am' and *bōdō* 'I shall be', and two past forms: the imperfect *běxъ* (*běaxъ*) 'I was' and the aorist *byxъ* 'I was' (Leskien 1969[1871]:164-165).

The non-past forms, e.g. *jesmь* 'am' and the *l*-participle of both prefixed and unprefixed verbs is considered to be the perfect which denotes a state at the moment of speech resulting from the past action, as in (68):

- (68) a. *jesmь tvorilъ* 'I have done'
 am do.PERF.PART.MASC.
- b. *jesmь sътворilъ* 'I have done'
 am do.PERF.PART.MASC.

c. *jesmъ bylъ* 'I have been'
 am be.PERF.PART.MASC.

Though the perfect is believed to have present relevance (Gardiner 1984:125), the fact that OCS perfect often translates the Greek aorist made Nandriš conclude that “it expressed the past in general without relation to the speaker” (Nandriš 1965:156). The perfect forms, however, are rarely represented in narration but are a much more frequent form in dialogues (Haburgaev 1974:284).

The imperfect of the verb ‘to be’ *běaxъ* with the *l*-participle serves as the past perfect, or pluperfect (Meillet 1934:264; Gardiner 1984:127) as in (69a). The auxiliary could also be in the aorist or even perfect, as in (69b).

(69) a. *běaxъ tvorilъ* ‘I had done’
 be.IMPT.1SG. do.PERF.PART.MASC.

b. *neslъ bylъ jesmъ* ‘I had carried’
 carry.PERF.PART.MASC. be.PERF.PART.MASC. am

Meillet considered the combination of the *l*-participle and the aorist of the auxiliary (*bьxъ*) to be some kind of a modal form, or conditional (Meillet 1934:264), while other authors state that only imperfect of the auxiliary is used in the pluperfect (Leskien 1969[1871]:169; Haburgaev 1974:285).

The system of the perfect and pluperfect, or, in Hewson’s (1997) terms, non-past and past Retrospective fits well into the system of two tenses and three aspects proposed for OCS

by Bubenik (1997:86) (Table 4.1).

	Imperfective	Perfective	Perfect
Non-Past	nes-ō 'I carry'		nes-īъ jesmъ 'I have carried'
Past	nes-ěaxъ 'I was carrying'	nes-oxъ 'I carried'	nesīъ běaxъ 'I had carried'

Table 4.1. Tense and aspect system in OCS.

Bubenik's analysis, however, does not consider yet another systemic form, the so-called 'future perfect' (Nandriš 1965:157), or '*Futurum exactum*' (Leskien 1969[1871]:169), i.e. the combination of the *l*-participle with what Meillet (1934:264) calls 'perfective present indicative' of the verb 'to be':

(70) tvorīlъ bōdō 'I will have done'

This form, also called 'the relative future tense' (Haburgaev 1974:267), denotes an action or state which is completed before another action or state in the future. The form of the perfective non-past stem of the verb 'to be' *bōdō* also appears in OCS texts in combination with a noun, an adjective or other types of participles to indicate future (Nandriš 1965:157):

- (71) a. bōdeši mlъčē 'thou shalt be dumb'
 be.PERF.2SG. silent.MASC.SG.NOM
- b. živъ bōdeši 'thou shalt be alive'
 alive.MASC.SG.NOM. be.PERF.2SG.

OCS appears to have a somewhat asymmetric system of tenses, with one tense for the Perfective aspect (the aorist), two forms in the Imperfective aspect (the present and the imperfect) and three forms in the Retrospective aspect (the perfect, the pluperfect and the future perfect).

4.2 Aktionsarten and aspect in Old Church Slavic.

The number and inventory of OCS aspects is also a matter of some argument. The existing views may be roughly classified as follows:

1. All or most OCS verbs were either perfective or imperfective similar to the situation in modern Slavic languages.
2. The opposition between perfective and imperfective verbs was only developing in OCS, thus most verbs could be either perfective or imperfective, with a number of other Aktionsarten.

The first point of view is represented by such outstanding experts as Meillet and Vaillant, cf. "Tout verbe slave est ou perfectif ou imperfectif" (Meillet 1934:282); "Un verbe est, en principe, perfectif ou imperfectif, les flottements d'aspect sont exceptionnels" (Vaillant 1964[1948]:319). This opinion, however, is debated, cf. the following statement:

It is not always easy to determine the aspect of a verb outside the context. The aspect of some verbs is uncertain: *viděti* 'to see', *běžati* 'to run', *sōditi* 'to judge' and other verbs vacillate between the two aspects (Nandriš 1965:161).

According to Vaillant, imperfective verbs denote an action in its development or repetition and the perfective verbs denote an action "envisagée dans son achèvement" (Vaillant 1964[1948]:319). These aspectual meanings interact with the conjugational system and are inseparable from it.

The second point of view claims that the Slavic verbal system to a considerable extent reflects an older IE aspectual category “definite-indefinite” (Kuiper 1937:22ff) which was reshaped and recategorised gradually leading to the emergence of the perfective vs. imperfective contrast (see the review of these opinions in Borodich 1953).

There is a strong systemic evidence in support of the claim that the opposition perfective-imperfective did exist in OCS: imperfective verbs could form present participles and were used in the imperfect to refer to the past event, whereas perfective verbs could not ordinarily form present participles and were used in the aorist to refer to the past event (Vaillant 1964[1948]:319). This argument, however, holds true only with a certain morphological class of verbs, namely the transitive verbs with the nasal suffix of the type *dvignōti* ‘move’ which are not attested in the imperfect, whereas other perfective verbs are attested in that form (see 4.3.2 for exceptions). For example, Leskien states that the perfective verb *dati* ‘give’ can not have the form of the imperfect (Leskien 1969[1871]:166) while Vaillant provides the imperfect form of this verb *daděaxъ* (Vaillant 1964[1948]:313).

It can not be denied, though, that the emergence of the category of Slavic aspect as we know it today was a lengthy process, as “many verbs, such as *iti*, could be of both aspects, and for some verbs it is difficult to determine which aspect is present. Some of these do not have the same aspect as their modern cognates” (Gardiner 1984:121).

Besides the grammatical opposition of perfective-imperfective verbs, Vaillant speaks of the distinctions between factitive (causative) and iterative verbs, though the morphological derivational process was already not productive in OCS (Vaillant 1964[1948]:317), as well

as the determinate and indeterminate meanings which are associated with some verbs (in Vaillant's examples entirely the verbs of motion). However, Vaillant considers the latter semantic distinction to be a particular case of the larger opposition between simple verbs and their iterative forms (Vaillant 1964[1948]:318).

Meillet does not restrict the notions of determinate and indeterminate to verbs of motion. He also speaks of the ancient determinate and indeterminate imperfectives such as *jěti* and *imati* 'take' (Meillet 1934:203) as well as the determinate action represented by the PIE root **dō* and manifest in the OCS verb *dati* 'give' (Meillet 1934:207-208), the determinate imperfective *ubivati* 'kill' as opposed to the indeterminate imperfective *biti* 'beat' and the perfective *ubiti* 'kill' (Meillet 1934:283).

Leskien singles out three Aktionsarten (*die Handlungsarten, Actiones*) of OCS verbs: imperfective, perfective and iterative, the latter conveying the idea of a repeated action which in itself can be perfective or imperfective (Leskien 1969[1871]:170). This view is shared by Nandriş (1965:159-161).

The process of the grammaticalisation of the perfective-imperfective distinctions must have begun in OCS but it was far from being complete even in the earlier periods of the individual Slavic languages. For example, in Old Russian texts there were a number of cases where prefixes did not change the aspect of some verbs while retaining their spatial meaning. Such cases persisted well into the middle ages (Mayo 1985:8). These facts, as well the existence of a large number of bi-aspectual verbs (Schuyt 1990:9) and the difficulty of establishing the aspect of particular OCS verbs (Gardiner 1984:121) suggest that Meillet's above opinion about every Slavic verb

being either perfective or imperfective is to a certain degree an overstatement. I would hold the view that OCS represents a transitional period which witnessed a gradual establishment of the lexical perfective and imperfective aspects. The new opposition was incorporating the semantics of the inflexional synthetic aspects and earlier IE aspectual distinctions into the overall meaning of the verb.

It is often emphasized that OCS generally did not have special means to mark the aspectual type of verbs: "There are, however, no decisive formal characteristics for the determination of perfective and imperfective aspect forms. The aspect of a verbal form is in practice determined by the correlation with the aspect of another verb derived from the same root" (Nandriš 1965:160). There were, however, different conjugational classes in OCS which in some works are correlated with certain aspects and Aktionsarten (Vaillant 1964[1948]:321-335; Schuyt 1990:9-29). The morphological classes appear to represent a certain system of the earlier aspectual distinctions during their evolution into the two-aspect system of modern Slavic languages.

4.3 Morphological classes of OCS verbs.

It was mentioned in 4.1 that OCS verbs had two stems: the present stem and the aorist-infinitive stem. There was also Ablaut in some verbs, and that is why the resulting morphological diversity of verbs allowed various classifications into different conjugations, or conjugational classes. The primary subdivision of OCS verbs into classes is based either on the aorist-infinitive stem or on the present stem. The first approach is traced back to Dobrovský and Miklosich, the second one to Leskien (Mladenov 1929:250).

Leskien's (1969[1871]:121-122) five classes are based on the formative elements of the present stem and include further subdivisions inside the classes into (a) stems which remain uniform throughout the paradigm, (b) stems which have a vocalic formant *-a-* or *-i-* in the aorist-infinitive stem with further subclasses of consonant and vowel-final stems, as well as into (c) primary verbs and secondary (derived) verbs. This amounts to the total of fifteen morphological groups of verbs.

Meillet considers the infinitive-aorist and the present stems separately, incorporating the two into an overview of the possible infinitive variants with different kinds of the present stem (Meillet 1934:277-281) stating that "Ainsi, un présent donné ne permet de prévoir ni l'infinitif, ni l'aoriste. Et, inversement, un infinitif donné ne permet pas de prévoir le présent correspondant" (Meillet 1934:280).

- Vaillant (1964[1948]:171) also takes the present stem as the basis for the classification of OCS verbs which is similar to Leskien's but with a total of sixteen different groups. Vaillant attempts to correlate some of the morphological classes with aspectual semantics (Vaillant 1964:259, 261, 270, 285). This approach becomes more prominent in more recent works (Haburgaev 1974; Gardiner 1985; Schuyt 1990). One of the most detailed analysis comprising the semantics of all the verbal classes is presented in Haburgaev 1974. His classification is a combined one, i.e. verbs are united into classes on the basis of the same morphological pattern of both the infinitive and the present stems. This results in the total of eight classes with minor semantic and morphological subdivisions. The following is the gist of Haburgaev's analysis. The OCS verbs in the following sections are in most cases given in two forms - the infinitive

marked by the final *-ti*, and the present tense of the third person singular marked by the thematic vowel *-e* or *-i-* and the inflexion *-tʲ*, e.g. *nes-ti* 'to carry', *nes-etʲ* 'carries/is carrying'.

4.3.1 The first class.

Both the stems of the verbs of the first class coincide with the root which could end either in a consonant (72a,b) or a vowel (72c,d):

- (72)
- | | | |
|----|---------------|---------------------------------|
| a. | <i>nes-ti</i> | <i>nes-etʲ</i> 'carry' |
| b. | <i>vez-ti</i> | <i>vez-etʲ</i> 'transport' |
| c. | <i>mř-ti</i> | <i>mř-etʲ</i> 'die' |
| d. | <i>klě-ti</i> | <i>klěn-etʲ</i> 'damn', 'curse' |

All the verbs of this class with the exception of five (see below) are imperfective and denote activities but not states, verbs of motion in this class are all determinate (Haburgaev 1974:309). The verbs of this class claimed to be perfective are *pas-ti* (**pad-ti*) 'to fall'; *reš-ti* (**rek-ti*) 'to say'; *sěs-ti* 'to sit down'; *leš-ti* 'to lie down' and *by-ti* 'to be'.

The last three verbs, however, are not quite regular: the verb 'to be' has two stems (*jesm* 'I am' referred to the eighth class, see 4.3.8, and *běaxʲ* 'I was'), and the verbs 'to sit down' and 'to lie down' have a nasal element in the forms of the present: *səd-* (from **sedn-*), *lěg-* (from **legn-*). This nasal element makes these two verbs similar to the class of verbs with a nasal suffix *-nō-* which denote a momentary action (see Class Three verbs, 4.3.3). We are thus left with two regular perfective verbs in the first morphological class. In fact, one may argue

that *pas-ti* 'to fall' was not a perfective but an imperfective determinate verb like all the other verbs of motion in this class, and the determinate verbs of motion are close in their meaning to the perfectives (Meillet 1934:283). This would reduce the number of the perfectives in class one to the verb *reš-ti* 'say'.

This class of verbs corresponds to Leskien's (1969[1871]) subclasses I.A.a, and I.A.b, and to Vaillant's (1964[1948]) subclasses D.a.b.d.

4.3.2 The second class.

The second class verbs have the aorist-infinitive stem with the suffix *-a-* whereas the present stem coincides with the root which ends in a consonant. The aspectual meaning of the verbs of this class is the same as of the first class, i.e. they are imperfective, and the verbs of motion are determinate (Haburgaev 1974:312). Inside the class there were two groups: one with Ablaut in the stems (73a, b) and the other without Ablaut (73c, d):

- (73)
- a. *byr-a-ti* *ber-etъ* 'take'
 - b. *zъv-a-ti* *zov-etъ* 'call'
 - c. *гъv-a-ti* *гъv-etъ* 'roar'
 - d. *met-a-ti* *met-etъ* 'throw'

These verbs correspond to Leskien's (1969[1871]) verbs class I.B.a.b. and Vaillant's (1964[1948]) class D.e.

4.3.3 The third class.

The verbs of the third class have the nasal suffixes in both the stems: *-nō-* in the aorist-infinitive stem and *-n-* in the present stem.

This class comprises two different groups. Most of the verbs are derived perfectives with the meaning of a momentary, punctual action (74a-c). There was also a limited number of intransitive imperfective verbs with the general meaning of the transition to a new state (74e-f) (Haburgaev 1975:313-314)

- (74) a. *du-nō-ti* (from *duti*) 'blow'
b. *zi-nō-ti* (from *zījati*) 'yearn'
c. *ky-nō-ti* (from *kzvatī*) 'nod'
d. *gas-nō-ti* 'dim'
e. *mṛṣz-nō-ti* 'get cold, frozen'
f. *mṛk-nō-ti* 'get silent'

The verbs of the second group are said to become perfective when prefixed (Haburgaev 1974:314). For a historical analysis of this group see Schuyt 1990:265-271.

This class corresponds to Class III in Leskien (1969[1871]) and Class C in Viallaint (1964[1948]).

4.3.4 The fourth class.

The verbs of the fourth class have the aorist-infinitive stem which coincides with the

root ending in a vowel (originally a diphthong; that accounts for different vocalism of some of the stems), and the present stem with the suffix *-j-*. The verbs of this class are generally transitive imperfectives and denote activity with several intransitive verbs of state and the perfective verb *děti* 'to put' (Haburgaev 1974:315). This class was small and unproductive.

- (75)
- | | | |
|----|--------|--------------------|
| a. | bi-ti | bi-j-etъ 'beat' |
| b. | pě-ti | po-j-etъ 'sing' |
| c. | bra-ti | bor-j-e-tъ 'fight' |

This class corresponds to class III.1.A.a. and III.1.A.b in Leskien (1969[1871]) and class B.b.(a),f.,g. in Vaillant (1964[1948]).

4.3.5 The fifth class.

The verbs of the fifth class had the suffix *-a-* in the aorist-infinitive stem and the suffix *-j-* in the present stem:

- (76)
- | | | |
|----|------------|----------------------|
| a. | věrov-a-ti | věru-j-etъ 'believe' |
| b. | daj-a-ti | da-j-etъ 'give' |

The verbs of this class denote actions and activities and are all imperfective. Many of them are derived from nouns (78) or other verbs (77) (Haburgaev 1974:319-320):

- (77) a. skak-a-ti from *skočiti* 'hop, jump'
 b. lěg-a-ti from *lešti* 'lie'
 c. naric-a-ti from *narešti* 'name'

Denominative verbs often have the suffix *-ov-(-ev-)* preceding the infinitive formant *-a-* (78):

- (78) a. věr-a 'faith' věr-ov-a-ti 'believe'
 b. besěd-a 'conversation' besěd-ov-a-ti 'converse'
 c. vračь 'doctor' vrač-ev-a-ti 'heal, treat'

This class of verbs is considered to be very productive. It corresponds to Leskien's Class III.1.B.a.,b. (1969[1871]) and Vaillant's (1964[1948]) subclasses B.d,e and partially B.c.

4.3.6 The sixth class.

The verbs of the sixth class are marked by the suffix *-a-* or *-ě-* in the aorist-infinitive stem, but unlike in Class Five, this formant was preserved in the present stem which also had the suffix *-j-*:

- (79) a. slab-ě-ti slab-ě-j-etъ 'get weak'
 b. vьpraš-a-ti vьpraš-a-j-etъ 'enquire'

This was a very productive class with verbs derived from adjectives (80a-b), nouns (80c-d) and from perfective (80e) or momentary (80f) verbs and determinate verbs of motion (80g):

- | | | |
|------|------------------------------|--------------------------------|
| (80) | a. bogat-ъ 'rich' | bogat-ě-ti 'get rich' |
| | b. pust-ъ 'bare, empty' | pust-ě-ti 'go into/be in ruin' |
| | c. gněv-ъ 'wrath' | gněv-a-ti 'be angry' |
| | d. děl-o 'smth done, affair' | děl-a-ti 'create, make' |
| | e. otvěti-ti | otvěšt-a-ti 'answer' |
| | f. pas-ti (*pad-ti) | pod-a-ti 'fall' |
| | g. letě-ti | lět-a-ti 'fly' |

The addition of the suffix *-a-* was accompanied by a lengthening of the root vowel unless it was already long, e.g. *let-ěti* > *lět-ati* 'fly'.

The derived verbs of this class are imperfective, often with an iterative meaning, and the verbs of motion are indeterminate (Haburgaeu 1974:320).

4.3.7 The seventh class.

The seventh class was marked by *-ě-*, *-a-* or *-i-* at the end of the aorist-infinitive stem and the present stem had the thematic vowel *-i-* (all the previous classes had the thematic vowel *-e-*, as in *delaj-e-tъ* 'does'):

- (81) a. letě-ti lět-itъ 'fly'

b. xodi-ti xod-itʹ ‘walk’

Most of these verbs are imperfective and denote a state, however, there were several clearly perfective verbs which had imperfective counterparts of the same root: *kupiti* ‘buy’ (imperfective *kupovati*); *lišiti* ‘deprive’ (imperfective *lišati*), *pustiti* ‘let out’ (imperfective *puštati*), *skočiti* ‘jump’ (imperfective *skakati*). Even though this class was rather large, it is considered to be non-productive (Haburgaev 1974:325).

The verbs with the infinitive root ending in *-i-* may be further subdivided according to their lexical meaning into two groups: indeterminate verbs of motion (82) and causatives (83):

- (82) a. nositi (from *nesti*) ‘carry’
b. vlačiti (from *vlešti*) ‘drag’
c. laziti (from *leztī*) ‘move’
- (83) a. saditi ‘seat, plant’ (from *séděti*) ‘sit’
b. ložiti ‘put’ (from *ležati*) ‘lie’
c. moriti ‘kill’ (from *mrěti*) ‘die’ (Haburgaev 1974:326-327).

This class of verbs corresponds to Leskien’s (1969[1871]) class IV and Vaillant’s 91964[1948]) class A.

4.3.8 The eighth class.

The eighth class consists of five athematic verbs *byti* 'be', *imēti* 'have', *jasti* 'eat', *dati* 'give' and *védēti* 'know'. The aorist-infinitive stems were different: *jasti* 'eat' had a stem similar to the verbs of class one (4.3.1), *dati* and *byti* had a stem similar to the verbs of class four (4.3.4) and *védēti* and *imēti* had stems similar to class seven (4.3.7) (Haburgaev 1974:327).

All these verbs are of Indo-European origin, and the preservation of the irregularities of their declension could be attributed to the frequency of usage.

4.4 Analysis of the OCS aspectual distinctions (lexical aspects).

The following considerations are taken as preconditions for the analysis:

1. The opposition perfective vs. imperfective in OCS is treated as a *morphological* category which is most evident in the contrast between the forms of the aorist (past Perfective) and the imperfect (past Imperfective) as it is described by Bubenik (1997).

2. The morphological, or conjugational classes are treated as a subsystem which reflects the lexical aspectual distinctions *excluding* the distinction between perfective and imperfective verbs in line with Mayo's (1985) and Schuyt's (1990) idea of the transitional character of the OCS verbal system.

3. The verbal system is treated as allowing a certain amount of irregularity both in terms of form and in terms of meaning. For that reason the analysis is not intended to account for every single verbal form nor usage and stipulates that the general systemic conclusions might be challenged by counter-examples. These cases, nevertheless, do not undermine the system,

which tolerates a certain amount of non-systemic phenomena.

In the sections that follow an attempt is made to relate some morphological derivational processes in OCS to the aspectual distinctions connected to the event-image development (see Chapter Three). Among the morphological processes considered are ablaut, suffixation and prefixation.

4.4.1 Ablaut: determinate and indeterminate lexical aspect.

OCS had a number of verbs which are related in their semantics, i.e. in that they name the same kind of action or activity but belonged to different morphological classes. Such pairs of verbs often showed consistent gradation of the root vowel, and the verbs which had the full grade vowel (84, right column) “expressed a lengthy or repeated action” (Mayo 1985:6), or “action as a state” (Borodich 1953:75) whereas the “verbs with a short vowel denoted a short, concrete action” (Mayo 1985:6) as in (84), left column. This process was fairly obscured in OCS by subsequent phonetic changes:

(84)	a. nes-ti	nos-iti	‘carry’
	b. bres-ti	brod-iti	‘wade’
	c. let-ěti	lēt-ati	‘fly’
	d. bŭr-ati	(sŭ)bŭr-ati	‘take’
	e. ves-ti (*ved-ti)	vod-iti	‘lead’
	f. ves-ti (*vez-ti)	voz-iti	‘transport’
	g. gŭn-ati	gon-iti	‘chase’

Ablaut must have denoted the old IE aspectual distinctions, and it was not limited to the verbs of motion, as in (84) but could be observed in a number of other verbs (85). It is reasonable to suggest that this opposition marked the Directional lexical aspect described in 3.2.2. The Determinate lexical aspect comprised the feature of the directional movement and necessarily the idea of termination or telicity while the Indeterminate aspect comprised the idea of the unorderedly movement and repetition. The latter might take over in the semantics of the verbs which do not convey the idea of spatial movement, as in the right column of (85):

- | | | | |
|------|-----------------|--------------|--------------|
| (85) | a. mřē-ti | (u)mirati | 'die' |
| | b. pьs-ati | pis-ati | 'write' |
| | c. žьd-ati | (o)žid-ati | 'wait' |
| | d. pьг-ati | (po)pіr-ati | 'step, kick' |
| | e. (pri)zъv-ati | (pri)zyv-ati | 'summon' |

Unfortunately, in OCS texts a large number of verbs which demonstrate the ablaut phenomenon are only attested in their prefixed forms, and it is difficult to make conclusions about the aspectual differences between them because of the considerable semantic import of the prefix. Although ablaut was no longer productive, it is possible to assume that the category of the Directional was present in OCS and was fairly regularly represented by the vowel gradation in a considerable number of the verbal roots. It also seems that with verbs other than verbs of motion the semantic expansion of the indeterminate movement, namely, the feature of repetitive activity, was generalised as the main semantic feature.

4.4.2 The suffix *-a-* in the infinitive stem: the Iterative lexical aspect.

The suffix *-a-* in the aorist-infinitive stem which is absent in the present stem apparently represents the Iterative lexical aspect. The iterative verbs are derived from the verbs which represent a continuous, indiscriminate activity or state:

- (86)
- | | |
|------------|------------------|
| a. liti | lij-a-ti 'pour' |
| b. skočiti | skak-a-ti 'jump' |
| c. mesti | met-a-ti 'throw' |

A number of verbs with the formant *-a-* in the infinitive stem clearly represent events which are performed in an inherently repetitive way, e.g. *čes-a-ti* 'comb', *syp-a-ti* 'sprinkle', *liz-a-ti* 'lick'. Compare the verbs in the left column of (87) to the derived verbs in the right column which represent a single act, or a single occurrence:

- (87)
- | | |
|---------------|-----------------------|
| a. kap-a-ti | kanōti 'drip' |
| b. plivati | plunōti 'spit' |
| c. laj-a-ti | lanōti 'bark' |
| d. dviđza-ati | dvignōti 'move, push' |

This type of lexical aspect is also represented by a large number of verbs which are derived from adjectives and nouns. (It has been stated in Chapter Three that nouns and adjectives are more likely to represent a static or uninterrupted event):

- (88)
- | | | | | |
|----|-------------|----------|----------|-------------------|
| a. | dux-a-ti | 'blow' | dux-ъ | 'breath', 'ghost' |
| b. | syl-a-ti | 'send' | syl-ъ | 'parcel' |
| c. | trepet-a-ti | 'shiver' | trepet-ъ | 'tremor' |
| d. | glagol-a-ti | 'speak' | glagol-ъ | 'word' |

Some verbs of this type were derived from nouns or adjectives by adding the suffix *-ov(-ev-)* before the formant *-a-*, as in (89):

- (89)
- | | | | | |
|----|--------------|-------------|-------|------------|
| a. | imen-ov-a-ti | 'name' | imē | 'a name' |
| b. | mil-ov-a-ti | 'pardon' | mil-ъ | 'pleasing' |
| c. | rad-ov-a-ti | 'bring joy' | rad-ъ | 'glad' |
| d. | voj-ev-a-ti | 'fight' | voi | 'warrior' |

Though it seems that this type of derivation creates the verbs with the Iterative lexical aspect from the verbs which imply an indiscriminate occurrence of the event, a number of examples testify that this derivational type could also create Iterative lexical aspect in the verbs which denote a single, punctual occurrence, cf. the following examples:

- (90)
- | | | | |
|----|-------|----------|-------------|
| a. | dati | daj-a-ti | 'give' |
| b. | dě-ti | děj-a-ti | 'put', 'do' |

The verbs *dati* and *děti* are generally claimed to be perfective, i.e. to denote a single act of giving or putting, so the derived verbs *dajati* and *dējati* must denote a succession of

similar acts. This may serve as an additional evidence to support the claim that this derivational type used to mark the Iterative lexical aspect. This derivational type is said to be very productive in OCS (verbs of the productive class 5).

4.4.3 The suffix *-a-* (*-ě-*) in both the infinitive and the present stem: the Indiscriminate aspect.

The formant *-a-* (*-ě-*) in both the stems appears to mark the verbs which denote activities or states which lasted and continued for a considerable period of time, i.e. the Indiscriminate lexical aspect. They were formed either from the verbs with the Semelfactive lexical aspect (91a, b), or derived from adjectives and nouns (91c-e):

- | | | |
|------|-----------------------------|--------------------------------------|
| (91) | a. <i>prosi-ti</i> | (<i>vr</i>) <i>praš-a-ti</i> 'ask' |
| | b. <i>otъveti-ti</i> | <i>otъvešt-a-ti</i> 'answer' |
| | c. <i>slab-ъ</i> 'weak' | <i>slab-ě-ti</i> 'be getting weak' |
| | d. <i>xud-ъ</i> 'thin' | <i>xud-ě-ti</i> 'lose weight' |
| | e. <i>rabot-a</i> 'service' | <i>rabot-a-ti</i> 'serve' |

This was a very productive type of derivation in OCS (productive class 6)

4.4.4 The nasal suffix: the Semelfactive lexical aspect.

In considering verbs with the nasal formant in their stems we exclude the small group of intransitive verbs with the meaning 'transition to a certain state' of the type *tonōti* 'drown'. All the other verbs appear to have the meaning of the Semelfactive lexical aspect, i.e. they denote

a unique single event. The following are the unprefixated verbs of this class for which Vaillant (1964[1948]:287-288) gives corresponding imperfective counterparts:

- | | | |
|------|--------------------|-----------------------|
| (92) | a. du-nō-ti | du-ti 'blow' |
| | b. zi-nō-ti | zij-a-ti 'open wide' |
| | c. la-nō-ti | laja-ti 'bark' |
| | d. ma-nō-ti | maj-a-ti 'signal' |
| | e. pli-nō-ti | plav-a-ti 'spit' |
| | f. re-nō-ti | rěj-a-ti 'push' |
| | g. sta-ti (stane-) | stoj-a-ti 'stand' |
| | h. klik-nō-ti | klic-a-ti 'cry, call' |

It appears that most of the imperfective counterparts of the verbs with the Semelfactive lexical aspect are derived from the verbs which have the Iterative lexical aspect, i.e. they are morphologically marked with the suffix *-a-* in their aorist-infinitive stem as described in 4.2. These types of verbs comprise the productive class 3.

4.5 Lexical aspects and prefixation.

The previous sections describe the OCS lexical aspects which include the Directional and the Manner of Occurrence features. It was presumed that the contrast between the perfective and imperfective lexical distinctions was expressed in OCS by morphological means, i.e. by the aorist and the imperfect. Apparently, the OCS texts represent a development in which the latter semantic distinction was associated with particular verbs as part of their overall semantics.

A special role in the development of the perfective and imperfective distinctions is attributed to prefixes. Originally semi-functional independent words similar to adverbs (Meillet 1934:377; Haburgaev 1974:327), they specified the meanings of the notional verbs and evolved through the process of grammaticalisation into prepositions when specifying a noun, and into preverbs (prefixes) when specifying the meaning of the verbs. OCS texts bear considerable evidence of the relative independence of these semi-functional words: cf. the usage of *ot* 'from', *do* '(up) to' and *vъ* '(in)to' with the verb *iti* 'go':

- (93) a. *ot-ide* *grada*
 from-go.AOR.3SG *city.GEN.SG*
 'He went away from the city'
- b. *ide* *ot grada*
 go.AOR.3SG *from city.GEN.SG*
 'He went away from the city' (Haburgaev 1974:328)
- (94) a. *do-iti* *grada*
 to-go.INF. *city.GEN.SG*
 'to come up to the town'
- b. *iti* *do grada*
 go.INF. up-to *city.GEN.SG*
 'to come up to the town'
- (95) a. *iti* *vъ gradъ*
 go.INF. into *city.ACC.SG*
 'to go into the town'
- b. *vъn-iti* *gradъ*
 into-go.INF. *city.ACC.SG*
 'to go into the town' (Vaillant 1964[1948]:335)

The adding of the prefix in many cases not only provided a spatial specification for

the verb but considerably changed its meaning. For example, the verb *tvoriti* 'do', 'make' with the prefix *ras-* acquired the meaning 'blend, mix' (Vaillant 1964[1948]:336).

Below is the list of the major prepositions and prefixes which participated in the derivational processes in OCS. The overview is based on Leskien (1969[1871]:115-117) and Vaillant (1964 [1948]:337-341).

vъ (variant: *vъn*) - 'in(to)' - as a preposition is used with Accusative and denotes entering, movement inside: *vъn-iti* 'enter', 'come in'; *vъvesti* 'lead in', 'introduce';

vъz (variants: *vъzъ*, *vъs*, *vъž*, *vъ*, the former only before a sibilant or /s/) - denotes movement up: *vъz-iti* 'go up', 'ascend'; or returning: *vъzvratiti* 'return';

do - as a preposition used with Genitive, denotes movement up to some point: *do-iti* 'go up to', 'reach'; *dokъnčati* 'finish', 'achieve';

za - 'behind', as in *zaiti* 'set (the sun)'; *zakryti* 'cover, close'.

iz (variants: *izъ*, *is*) - as a preposition is used with Genitive, denotes movement outside, exiting or extraction: *iziti* 'go out, exit' *ispiti* 'drink up', 'empty (by drinking)';

mimo - 'past', 'by', as in *mimoiti* 'pass', 'go by';

na - has the meaning of 'on (a surface)', as in *napasti* 'fall on (to something)';
naležati 'lie on';

o (variants: *obъ*, *obъs*) - 'around, about', as a preposition is used with Accusative to denote direction and with Locative to denote place: *obrezati* 'circumcise'; *ograditi* 'fence';

ot (variant: *otъ*) - 'off', 'from', as a preposition is used with Genitive: *otiti* 'go away', 'depart';

po - originally meant 'among' but this meaning was already lost in OCS. As a preposition it is used with the Dative to denote movement or location along some space; with verbs it is used as a prefix with a generalised perfectivising meaning, occasionally with an inchoative one: *povesti* 'start leading';

podъ - 'under', as in *podъložiti* 'put under';

pri - 'by', 'at', as a preposition was used with Locative; conveys the idea of approaching;

pro - 'through', 'across', as in *proiti* 'go through', 'cross';

prě - 'over', 'beyond', as in *prěiti* - 'pass', 'overstep', 'surmount';

prědъ - 'in front of', 'before', as a preposition was used with Accusative to denote direction, with Instrumental to denote location;

sъ (variant *sъn* before vowels) has two distinct meanings, as a preposition used with Instrumental has the meaning of 'with', and with Genitive has the meaning of 'off, from'. With verbs both the meanings were evident;

u - usually means 'by', 'beside' as a preposition with the Genitive; as a prefix it has the meaning of 'off', 'away'.

The general rule for the aspectual effect of the prefixes in OCS is described as follows: prefixes changed imperfective verbs into perfective unless the imperfective verbs were iterative; in the latter case the prefixed verbs remained imperfective. This could be seen from the following statement by Leskien:

die Präsensform des mit Präposition zusammengesetzten Iterativverbums hat den Sinn der Gegenwärtigen Zeit in Verhältnis zu dem futurischen Sinn der Präsensform des mit der gleichen Präposition verbunden nicht iterierten Perfektivverbums ["the present of the prefixed iterative verb has the meaning

of the present/contemporaneity compared to the meaning of the future in the non-iterative verbs with the same prefix" (Leskien 1969[1971]:174), translation mine - VV].

Since the grammatical contrast between the Perfective and Imperfective primarily involves the different reference of their present forms, it is evident that the prefixed iterative verbs remained imperfective.

As some of the verbs are only attested in the prefixed forms, it is difficult to analyse the aspectualising behaviour of the prefixes. This problem is treated in the first section of the following chapter which is devoted to the analysis of prefixes and aspectual distinctions in modern Russian.

4.6 Summary of Old Church Slavic.

The OCS verbal system is presumed to be a transitional stage at which three kinds of lexical aspects are noticeable:

1. The opposition between the Determinate and Indeterminate lexical aspects manifest in the morphological alternation of the root vowel. The opposition was fully lexicalised and was no longer productive.
2. On the basis of the semantics of the Indeterminate Aktionsart there appeared a semantic contrast between Iterative lexical aspect (the verbs of the productive fifth class), Semelfactive lexical aspect (most of the verbs with the nasal suffix in the stem, the productive third class) and Indiscriminate lexical aspect (most of the verbs of the productive sixth class). The verbs of the unproductive classes could be referred to one of the three Manner of Occurrence lexical

aspects or to the Determinate or Indeterminate Aktionsarten.

The semantic opposition perfective vs. imperfective was expressed morphologically at the earlier stages of Ancient Slavic by the aorist and the imperfect. This contrast was gradually lexicalised, i.e. was becoming associated with certain verbs as units of the lexicon which made the existence of the morphological aspectual distinctions redundant as the verbs appeared to be marked for perfectivity or imperfectivity twice - in the lexicon and morphologically by the aorist or the imperfect.

The contrast between perfective and imperfective verbs incorporated the earlier aspectual distinctions as described in Chapter Three with the Iterative and Indiscriminate Aktionsarten being included into the imperfective category and Semelfactive Aktionsart included into the perfective category. The latter, however, was more abstract than the Semelfactive, and included the idea of the subject outside the event which was not necessarily a punctual event.

The data of OCS suggest that the stages of the event-image development were undergoing the same kind of processes: they appeared successively as morphological categories at some point of the language's existence, and then gradually became lexicalised as the next type of aspectual distinctions emerged as a morphological category and went through the same stages. OCS shows a still recognisable but no longer productive morphological process (Ablaut) which marked the opposition of the Directional aspects, a still operative but disappearing morphological derivational paradigm of the Geschehensarten, i.e. Manner of Occurrence aspects (conjugational classes), and the transition of the Perspective aspects from the morphological stage (the aorist and the imperfect) to the stage of the lexical aspects. The emerging new lexical aspectual system

utilized the morphology which had been used for marking aspects of the previous stage (suffixation) as well as the semantic potential of the prefixes.

Chapter Five.

The meanings and functions of Russian prefixes.

In this chapter an overview on the meanings and functions of verbal prefixes is given in 5.1 which is followed by the proposal which summarises their meanings into that of either location or direction (5.2) with the resulting possibility of applying those meanings both to space, time and perception which determines the particular aspectual and lexical meaning of prefixed verbs due to the interaction of their inherent Aktionsarten with the spatial, temporal or perceptive reference of the prefixes (5.3).

5.1 General information.

Modern Russian has nearly the same inventory of prefixes as did Old Church Slavic (see 4.5). Some of the OCS prefixes, though, either ceased to exist (e.g. *mimo* - 'past, by') or are no longer productive (e.g. *iz-* 'out of', *voz-* 'up') and in many cases can not be separated from the roots which do not function as independent words, e.g. *воздѣтъ*^{pf} /*vozdat'*/ 'pay (tribute, punishment etc.)'; *изъять*^{pf} /*izjat'*/ - *изымать*^{imp} /*izymat'*/ 'confiscate' from OCS *iz* 'out of' and *jĕti*, *imati* 'take'. In some cases the prefixed forms have undergone a considerable semantic re-interpretation and can not be related as aspectual pairs to the unprefixed verbs they were once derived from, e.g. *изложитъ*^{pf} /*izložit'*/ 'relate, narrate' from *-ložiti*/ 'put, place'; *узнать*^{pf} /*uznat'*/ 'find out, learn' from *знать*^{imp} /*znat'*/ 'know'.

The prefixed imperfective verbs generally change into perfective with two exceptions. The first one involves a group of prefixed loan-translations from other languages and borrowings

from Old Church Slavic, such as *зависеть*^{imp} /zaviset'/ 'depend' from *висеть*^{imp} /viset'/ 'hang'; *предчувствовать*^{imp} /predčuvstvovat'/ 'have a forefeeling', 'have a premonition' from *чувствовать*^{imp} /čuvstvovat'/ 'feel'; *предвидеть*^{imp} /predvidet'/ 'foresee' from *видеть*^{imp} /videt'/ 'see' *принадлежать*^{imp} /prinadležat'/ 'belong' (note the double prefixation *pri-* and *nad-* in this case) from *лежать*^{imp} /ležat'/ 'lie'.

The second group of non-perfectivizing prefixed verbs comprises indeterminate verbs of motion such as *ходить*^{imp} /xodit'/ 'go, walk' *приходить*^{pf} /prixodit'/ 'come' (Forsyth 1970:18) and verbs with a distinct iterative meaning marked by the suffix *-iva(-yva-)*, e.g. *говаривать*^{imp} /govarivat'/ - *поговаривать*^{imp} /pogovarivat'/ 'speak'; *хажывать*^{imp} /xaživat'/ - *захажывать*^{imp} /zaxaživat'/ 'go, drop by'. The prefixed iteratives retain their repetitive Aktionsart.

Besides changing the aspect of most imperfective verbs the prefixes add a considerable semantic import thus modifying the lexical meaning of both perfective and imperfective verbs, cf. the meaning of prefixed verb *дать*^{pf} /dat'/ 'give':

- (96)
- | | | |
|-------------|------------|-------------------------|
| a. отдать | /otdat'/ | 'return, give back' |
| b. задать | /zadat'/ | 'give an assignment' |
| c. придать | /pridat'/ | 'add, modify' |
| d. сдать | /sdat'/ | 'give up, turn in' |
| e. выдать | /vydat'/ | 'deliver, issue' |
| f. раздать | /razdat'/ | 'give away, distribute' |
| g. передать | /peredat'/ | 'transfer' |

These lexical semantic modifications are usually connected with the meaning of the corresponding prepositions, e.g. *от* /ot/ 'from', *за* /za/ 'behind, beyond', *при* /pri/ 'by, at' etc.

5.1.1 Functions of the prefixes.

There are conflicting opinions about the way prefixes operate in Russian. According to one opinion, the prefix has at least three functions. Firstly, it expresses spatial or abstract relations and modifies the original meaning of the verb producing a *lexical derivative*, for example *ходить*^{imp} /xodit'/ 'walk' - *приходить*^{imp} /prixodit'/ 'come', *брать*^{imp} /brat'/ 'take' - *выбрать*^{pf} /vybrat'/ 'choose' (Forsyth 1970:18). Secondly, the prefix leaves the lexical meaning intact while indicating how the action develops or proceeds in particular circumstances, i.e. expressing Aktionsarten, or procedurals, in such verbs as *походить*^{imp} /poxodit'/ 'walk a while', *перебрать*^{pf} /perebrat'/ 'take one after another' (Forsyth 1970:19). Thirdly, the prefixes merely convert the imperfective verb into a perfective and do not add any noticeable lexical semantics, cf.: *пить*^{imp} /pit' / - *выпить*^{pf} /vypit'/, *обедать*^{imp} /obedat'/ - *пообедать*^{pf} /poobedat'/ 'have dinner', *писать*^{imp} /pisat'/ - *написать*^{pf} /napisat'/ 'write'. Once the prefixes in such cases neither modify the lexical meaning nor the Aktionsart, they are referred to as 'empty' (Forsyth 1970:19), or 'grammatical' (Vey 1952:82) as opposed to the derivational, or 'full' prefixes of the first two kinds.

Another view is to treat prefixation as a word-building, i.e. derivational process, so that prefixed verbs are considered to be new lexemes rather than the aspectual pairs of unprefixed verbs. The number of purely aspectual pairs in Russian, consequently, is very small (Maslov

1961:67-58; Isačenko 1962:355 – the latter with some reservations), e.g. *бросить*^{pf} /brosit'/ – *бросать*^{imp} /brosat'/, *двигать*^{imp} /dvigat'/ – *двинуть*^{pf} /dvinit'/ 'move'. One of the arguments in favour of this opinion is the fact that an unprefixed simple verb is often directly opposed to more than one prefixed verb (Isačenko 1962:364-365), cf. the prefixed variants of the verb *дать*^{pf} 'give' in (96) above in which the perfective verb *give* is contrasted to a number of prefixed derivatives, also perfective. This highlights the derivational character of prefixation. However, in (97) the lexical meaning of the prefixed forms does not differ much from that of the imperfective they were derived from:

- (97) a. *пить*^{imp} /pit'/ *попить*^{pf} /popit'/ *выпить*^{pf} /vypit'/ 'drink'
 b. *просить*^{imp} /prosit'/ *спросить*^{pf} /sprosit'/ *попросить*^{pf} /poprosit'/ 'ask'

The central problem with the traditional theory of empty prefixes is that empty prefixes, although identical in function (they all perfectivize without introducing additional shades of meaning), cannot be considered synonyms: each prefix must contain information concerning the kinds of verbs it perfectivizes (Gallant 1979:16).

Gallant's critique may be illustrated by the following examples (98) in which the perfective counterpart of the imperfective verb is formed by a particular prefix. All of these prefixes are considered to be empty but they display a highly selective behaviour in attaching to only some of the verbs. Thus the verb 'do' is perfectivized by the prefix *s-*, the verb 'write' has a perfective pair with the prefix *na-*, the verb 'read' requires the prefix *pro-* in order to form a perfective form while the verb 'love' is perfectivized by the prefix *po-*. These prefixes can not be possibly

behaviour which must be determined by their semantics. This problem is addressed in section 5.2.3.

5.1.2 Approaches to the study of Russian prefixes.

One can notice two paradigms in the study of Russian prefixes: a taxonomical, or traditional approach, and a structural approach in a variety of modifications.

The traditional approach provides a list of meanings and submeanings associated with particular prefixes but it generally does not attempt to establish a single or a very limited number of core, or basic meanings which underlie the other meanings and submeanings. The following is an example of a taxonomical description of the prefix *za-* from the Academy Russian Grammar of 1960 which lists nine types of meanings with a few submeanings:

1) direction of the action:

a) movement behind an object, e.g. *забежать* /zabežat'/ 'run behind something', *завести* /zavesti/ 'lead someone behind something', *заложить* /založit'/ 'put something beyond or behind, *заползти* /zapolzti/ 'crawl behind/beyond something' etc.;

b) movement outside the limits of something, somewhere, far away, e.g. *забредти* /zabresti/ 'walk, wander too far', *завести* /zavesti/ 'lead someone astray, too far', *завезти* /zavezti/ 'bring, transport far away', *заехать* /zajexat'/ 'come to an unexpected place', *заслать* /zaslat'/ 'send far away' etc.; the type is productive in modern Russian;

2) veiling, covering, bringing the edges of an object together, filling empty space, e.g. *завалить* /zavalit'/ 'cover by putting a lot of objects over, flood', *заделать* /zadelat'/ 'fix (a hole, leak

etc.), *задернуть* /zadjornut'/ 'close by pulling (curtain etc.), *закидать* /zakidat'/ 'cover completely by throwing something', *заклеить* /zakleit'/ 'seal by gluing' etc. The verbs are transitive and are formed from transitive verbs from which they differ in government: *лить чернила* /lit' čemila/ 'pour ink (ACC.)' - *залить чернилами* /zalit' černilami/ 'cover with ink (INSTR.)'. The type is productive.

3) completeness, abundance of the activity

a) its excess, e.g. *забросать* /zabrosat'/ 'throw all over', *закидать* 'cover completely by throwing, *задарить* /zadarit'/ 'give too many presents' etc.;

b) exhaustiveness (the prefix adds the meaning 'to death', 'to destruction'): *забить* /zabit'/ 'beat to death', *запороть* /zaporot'/ 'flog to death', *засечь* /zaseč'/ 'flog to death', *зарубить* 'chop to death' etc.;

c) the running of the action beyond a normal course in relation to its continuity or the degree of the involvement of the doer. The group is formed by the adding of the prefix and the reflexive suffix -*sja*, e.g. *заболтаться* /zaboltat'sja/ 'get carried away by chatting', *заговориться* /zagovorit'sja/ 'get immersed in talking', *заработаться* /zarabotat'sja/ 'work too much without noticing anything else', *засидеться* /zasidet'sja/ 'spend too much time while sitting somewhere' etc.; the type is productive.

4) concurrent activity: visiting something or somebody on the way, incidentally, e.g. *забегать* /zabežat'/ 'drop by', *забредеть* /zabresti/ 'wander by', *завести* /zavesti/ 'bring someone on one's way', *зайти* /zajti/ 'drop by'; the type is limited in productivity;

5) beginning of an action: *зааплодировать* /zaaplodirovat'/ 'start applauding', *заговорить*

/zagovorit' / 'start speaking', *заиграть* /zaigrat' / 'start playing'; *закричать* 'start shouting' etc.; the type is highly productive;

6) subsequent action, e.g.: *застать*, *запить* (to eat or drink something immediately after taking something else, as in 'take medicine with water'); the type has a limited productivity;

7) fixation of the activity: *зарисовать* /zarisovat' / 'draw, make a sketch', *заснять* 'take a picture'; the type is very productive;

8) an additional meaning 'beforehand', 'for the future', e.g.: *заготовлять* /zagotovljat' / 'procure, prepare', *закупить* /zakupit' / 'buy, procure', *запланировать* /zaplanirovat' / 'to plan something'. The type is productive and its usage is spreading in the modern language;

9) achievement, acquisition of something in the result of the action, the adding of the prefix changes intransitive verbs into transitive: *завоевать страну* /zavojevat' stranu / 'conquer the country', *заработать большую сумму* /zarabotat' bolšuju summu / 'earn a large sum'. The type shows little productivity (Istrina 1960:580-583).

In an even more detailed taxonomical description (Bogusławski 1963) the same prefix *za-* is assigned 24 meanings (see the critique in Gallant 1979:22ff).

The major deficiency of the taxonomical approach is that it provides a random list of possible meanings with no criteria for determining the systemic relationships between them. Nor does this approach explain the ability of some of the prefixes to be pure aspectualisers, i.e. their ability to be 'empty prefixes'.

These issues are addressed to some extent in the structuralist approach towards prefixation in Russian (Flier 1975, 1985; van Schooneveld 1978; Gallant 1979) with an emphasis on the

unity and integrity of the prefixal semantics. In such studies Russian is presumed "to possess a finite number of semantic features constituting an abstract, coherent conceptual system, an interrelationship of whose members can be stated as rules of implication or entailment" (Gallant 1979:48). The structuralist analysis provides a limited and definite set of semantic features which a verb and a prefix can have, and this "set of semantic features can be likened to a keyboard offering almost limitless melodic possibilities" (Gallant 1979:51). The semantic structure of the predicate can be compared to the structure of a harmonic series, involving a fundamental, i.e. the invariant features, and a series of partials, i.e. variable features (Gallant 1979:51).

In a modified structuralist approach the meaning of the prefix is explained in terms of configurations (Janda 1985:27), or prefix frames (Flier 1985:46-47), drawn in space. A configuration consists of a landmark, also called a domain, and a trajector which moves in relation to it. The trajectory is treated as a profile of this movement, usually with respect to time.

Each prefix has one or more configurations, each of which may in turn signal one or more submeanings. If a configuration is associated with more than one submeanings, usually one submeaning is spatial and the rest are metaphorical extensions of that submeaning, created by varying the referents of the landmark and the trajector (Janda 1985:27).

In Flier's analysis the domain is surrounded by a periphery, and the movement of the trajector may extend outside the domain into the peripheral space (Flier 1985:47).

Structuralist theories concerning Russian prefixes have a number of attractive analytic properties: they attempt to find the common denominator, an underlying system for the variety of meanings displayed by the prefixes, and they look for that underlying system in spatial relations which is logical, taking into account the close connection between the prefixes and corresponding

prepositions. These kinds of analysis, however, raise some questions.

The feature analysis appears to contain too many features for a normal speaker of a language to keep in mind and process while speaking. For example, a simplex verb in Gallant's example *on ux poem* /on ix rvjot/ 'he blows them up' presumably has the following semantic features:

- (99)

+ verb + motion + "disunion" + patiential + patient + agentive 0 agent 0 instrument 0 "prefixed view" 0 past 0 perfective	(Gallant 1979:53).
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Once the prefix may have several more semantic features, the semantics of the resulting prefixed verbal form becomes formidable and is very unlikely to be realised simultaneously and processed in the mind of a native speaker.

The modified structuralist approach does not explain why the spatial relations of the trajector in some cases are referred to time and perfectivize some verbs in some cases but not in others. In fact, the list of prefixal meanings obtained as the result of the analysis in terms of trajector movements seems as random as in the traditional approach, cf. the traditional analysis of the prefix *za-* above with its nine types of meanings in a structuralist analysis of the same prefix. In the latter the prefix *za-* is described in terms of five configurations which yield the following meanings: *Deflection, Fix, Change of State, Excess, Inchoative, Exchange* for the

first configuration, and *Cover, Splatter, Fill, Surface* (one for every other configuration) (Janda 1985:30-7).

It is obvious that a language system in all its complexity must have a simpler mechanism which is easily acquired by a child learning the language. In the following section I will propose some ideas concerning the cognitive mechanism which underlies the use and functioning of Russian prefixes.

5.2 Proposal for prefixes.

The main points of the proposed analysis of the prefixes may be summarised in the following statements:

- productive prefixes have the meaning of the corresponding preposition;
- when added to the verb they modify the event by providing a directional or localising perspective which results in the external view of the event and, consequently, in the perception of the event in its totality. The event gets totalised in either perception, space or time which turns imperfective verbs into perfective;
- Aktionsarten, i.e. different features of the event image development, interact with the spatial and directional semantics of the prefix resulting in a semantic diversity of the produced compound verbs.

In the following analysis the semantics of the prefixes capable of being 'empty' will be correlated with the meanings of the related prepositions in their spatial (directional and localising) meanings. The effect of these rather elementary meanings will be examined when

they attach to a simple verb, i.e. the mechanism of perfectivisation, and different semantic outcomes will be attributed to different lexical aspects of the simple verb rather than to the meaning of the prefixes.

5.2.1 Punctual and perfective events.

Before discussing the problem of prefixation and the resulting perfectivisation in Russian, we must deal with the distinctions between a perfective event and a punctual event. In Chapter Three it was stated that a punctual event is a feature of the event-image development reflecting the manner of the occurrence of the event. This occurrence may proceed in perception in a continuous, uninterrupted way, as a sequence of analogous perceptive impulses, or as a single perceptive act. The latter was said to be the punctual occurrence, and the corresponding lexical aspect was called Semelfactive. It is crucial to emphasize that a punctual event occurs through one perceptive act, i.e. the beginning, the continuation and the completion of the event are viewed and perceived in the operative, or retentive memory without recourse to the long-term memory and are unobscured by other events which may interfere with the perception and separate different stages of the event.

It was also stated in Chapter Three that a perfective aspect reflects the cognitive representation of the subject of the event being outside the event. Once the punctual event occurs within one perceptive act, it is but natural that this event would be perfective. The latter, however, is a more abstract category which is not restricted to the perceptive stage of cognition. When the long-term memory becomes involved, the whole of the event may be realised in its

totality (Bondarko 1971), as a unit of action (Schuyt 1990) or as a blob (Comrie 1976) with its constitutive stages (the beginning, the continuation and the end) as an uninterrupted entity. It may therefore be said that the perfective event represents the event as a whole in *consciousness* whereas the punctual event represents an event as a whole in *perception*.

To illustrate the above point let us address some examples. Verbs may be used to represent punctual events which are viewed as beginning and finishing in front of the speakers eyes/ears so that the very idea of the beginning and end is neither relevant nor important. In such instances as *She said 'Hello' to me* the verb *to say* signals an action which was begun and was completed in perception, and thus represents a Semelfactive lexical aspect. In the example *She told me the story of her life* the event represented by the verb does not imply that the story was told in one uninterrupted moment, i.e. it does not imply a single perceptive act of hearing on the part of the speaker. The verb in the second example, however, does imply that the action of telling was completed regardless of whether that was a lengthy process spread over a period of many an evening or several hours interrupted by other activities such as meals, or whether it was a matter of several minutes, and the story was interrupted by questions on the part of the listener and involved any other kind of event. All that is just not relevant to the representation of the verb *tell* in the above example which presents the event as a unit in consciousness. This event therefore may be called *perfective*.

In English the categories of Semelfactive or Perfective Aspects can be revealed in the context of an utterance and not in morphology, i.e. they are *contextual categories* as one can not normally point to specific language means and patterns of morphological behaviour to

distinguish between these aspects as opposed to Indiscriminate, Iterative or Imperfective. In Russian we can find morphological classes of verbs which show both the Semelfactive and Perfective as aspects which are marked morphologically. The verb *бросить*^{pf} /brosit'/ 'throw', for example, is a clear case of a punctual event in perception, i.e. a verb with a Semelfactive lexical aspect. With non-abstract physical objects this verb denotes an action which starts and is finished within a single uninterrupted perceptive period, as in *бросить камень* /brosit' kamen'/ 'throw a/the stone'. With a non-physical object, the same verb acquires the meaning of 'abandon, leave, quit' and must be generally considered a perfective rather than semelfactive, as in *бросить школу/работу/мужа* 'quit school/work/ abandon a husband' because in the metaphorical usage of the verb the events described are unlikely to proceed in perception, and one is usually faced with the resulting states which allow the above description.

Some of the verbs can not have a semelfactive reading due to the nature of the event described. For example, static events that unroll continuously can not be viewed in their entirety in one perceptive act. It necessarily involves memory and/or imagination to present a static event as a whole which means that the event is represented as such *in time* rather than in space or perception. Thus the verb *спать*^{imp} /spat'/ 'sleep' is punctualised in time, and its perfective form *поспать*^{pf} /pospat'/ indicates the act of sleeping as a whole. When one says *Ребёнок хорошо спал* 'the child (has) had a good sleep' the event is presented as a cognitive entity. The speaker in this case does not and can not refer to all the stages of the event, in fact the speaker may only have witnessed the end of the child's sleeping, i.e. the child's awakening in high spirits. The beginning and the duration of the event are thus a result of the involvement

of memory and/or imagination. In this case we encounter a clearly perfective usage of the verb to represent an event which has a considerable duration yet is presented as one cognitive unit without references to its stages.

One can consequently conclude that punctual events (the whole occurrence of the event within one perceptive act) are necessarily perfective whereas all perfective verbs may be interpreted as punctual either in perception (Semelfactive) or in consciousness (Non-Semelfactive). In the latter case the event may be in fact durative and can be distributed through several perceptive acts, i.e. can be interrupted in perception yet presented as a cognitive whole, as in *Я прочитал роман «Война и Мир»* 'I (have) read *War and Peace*'. This is not important for the perfectivity of the verbal representation as long as the subject of the event is viewed separately, outside the event.

To sum up, the notion of a punctual (semelfactive) event belongs to the fourth stage of the event image development alongside with the notions of the Indiscriminate and Repetitive Occurrence of the event. The idea of perfectivity and imperfectivity is the next stage, i.e. the fifth stage in the event-image development at which the ideas of the indiscriminate and iterative occurrence are united according to their common feature - the location of the subject of the event inside the event - as imperfective event, whereas the perceptually punctual events are united with events stretching over several perceptive acts according to the common feature of the event-image development, i.e. the subject of the event being separated from the event.

5.2.2 Prefixation: perfectivity as a side-effect of spatial and temporal localisation.

The prefixes in modern Russian are semantically related to prepositions. In some cases the prefix and the preposition are homophonous, cf. *с* /s/ 'from, off', *сбросить*^{pf} /sbrosit'/'throw off'; *на* /na/ 'on', *набросить*^{pf} /nabrosit'/'throw on'; *за* /za/ 'behind, beyond', *забросить*^{pf} /zabrosit'/'throw far away'. In other cases the prefix and the preposition are related semantically but not phonetically, e.g. the semantics of the preposition *к* /k/ 'to, towards' is largely covered by the prefix *при-*, as in *прилететь*^{pf} /priletet'/'to fly in', *приводить*^{imp} /privodit'/'bring in, lead to', and the meaning of the prefixes *пере-* /pere/ and *про-* /pro/ corresponds to the meaning of the preposition *через* /čerez/ 'across, through', as in *перейти*^{imp} *улицу* 'cross the street', *просмотреть*^{imp} *письма* 'look through the letters'. There is also a certain parallelism in some prefixes, as some of them have semantic doublets inherited from Old Church Slavic and are no longer productive, cf. unproductive prefixes *из-* /iz/, *вос-* /voz/ and their productive counterparts *вы-* /vy/ and *вз-* /vz/ in such verbs as

- | | | | | |
|-------|----|-------------------------------|------------|------------------|
| (100) | a. | <i>брать</i> ^{imp} | /brat'/' | 'take' |
| | b. | <i>избрать</i> ^{pf} | /izbrat'/' | 'elect' |
| | c. | <i>выбрать</i> ^{pf} | /vybrat'/' | 'choose' |
| (101) | a. | <i>вести</i> ^{imp} | /vesti'/' | 'lead' |
| | b. | <i>возвести</i> ^{pf} | /vozvesti/ | 'erect, lead up' |
| | c. | <i>взвести</i> ^{pf} | /vzvesti/ | 'cock (a gun)' |

The prefixes *из-* /iz/ and *вы-* /vy/ correspond to the preposition *из* /iz/ 'out of'. The

prefixes *вз-* /vz/ and *воз-* /voz/ denote movement up and correspond to the prepositions *на* /na/ 'on' and *в* /v/ 'in' in their directional meaning, i.e. 'up onto' and 'up into'.

The perfectivising effect of the prefixation may be a side-effect which follows inevitably once the prefix adds the location or direction of the event development. The semantics of the preposition specifies the spatial co-ordinates of the event and this separates the subject of the event from the event producing the perfectivising effect. Thus it is the semantic import of the related preposition which orients the event in space or in time that leads to the process of perfectivisation. This process is restricted to the verbs which have the Indiscriminate lexical aspect, i.e. representing events as occurring continuously in perception. With verbs which represent a punctual or repetitive event, perfectivisation does not occur, and prefixes only add the spatial characteristics of the corresponding preposition, cf. the meanings of the prefixed and unprefixed verbs representing punctual (102a-b) and repetitive events (102c-d) and are semantically marked for the Semelfactive or Iterative lexical aspects.

- (102) a. *дать*^{pf} /dat'/ 'give' *подать*^{pf} /podat'/ 'hand out'
 b. *бросить*^{pf} /brosit'/ 'throw' *отбросить*^{pf} /otbrosit'/ 'throw away'
 c. *хаживать*^{imp} /xaživat'/ 'go' *похаживать*^{imp} /poxaživat'/ 'go'
 d. *брасывать*^{imp} /brasyvat'/ 'throw' *отбрасывать*^{imp} /otbrasyvat'/ 'throw away'

This peculiarity can be explained in the following way. As stated in the previous section, the category of perfectivity incorporates the notion of a punctual event, consequently the addition

of the prefix does not change the aspectual shape of the verb and only adds the spatial specification. The repetitive events, as was shown in Chapter Three, represent the subject inside a string of identical occurrences. A semantic expansion of this cognitive image may be the string of identical events in time with the resulting categories of frequentative and habitual event (see 3.2.2). In this kind of representation the subject of the event is located inside a sequence of individual punctual occurrences, thus necessarily *inside* the event constituted of such a sequence. On the other hand, the subject of the event is located *outside* any individual, or single occurrence in that sequence. As a result, there is an apparent cognitive difficulty in representing the subject of the event outside an event composed of a number of separate occurrences, and for that reason verbs representing repetitive occurrences of the event do not get perfectivized when a prefix is added to them.

5.2.3 Empty prefixes and prepositions.

The prefixes which are said to be pure perfectivizers, i.e. they turn an imperfective verb other than iterative into a perfective without contributing any additional semantic content are *no-* /po/, *co-* /s(o)/, *na-* /na/, *za-* /za/, *o(b)-* /o(b)/, *npo-* /pro/, *y-* /u/. I claim that these prefixes always retain the meaning of the corresponding prepositions in reference to space, time or perception, and a certain amount of semantic bleaching in some cases must be attributed to the influence and the effect of the simplex verb. The variety of meanings which are often ascribed to the prefixes is also a result of the interaction of the prepositional semantics with that of the verb.

5.2.3.1 The prefix *po-*.

Despite the claims that the prefix *po-* does not coincide in meaning with the preposition *po* (Istrina 1960:594), I insist that it is related to the homophonous preposition *po* which corresponds to the English 'on some kind of surface, along some kind of a line'. The preposition is used with purely spatial references with the Dative case for example: *по дорожке* / *po dorozhe* / 'on/along the road' *по полю* / *po polju* / 'in the field', *по путям* / *po putjam* / 'along the tracks'. This is a clearly directional meaning, as the preposition does not combine with predicates denoting a static subject, and in order to express the localising reference the preposition *na* is used, cf.:

- (103) a. Я шёл^{imp} по полю
 I go.SG.PAST along field.DAT.
 'I was going in/along the field'
- b. Я стоял^{imp} на поле
 I stand.SG.PAST on field.PREP.
 'I was standing in the field'

With the Accusative the preposition can be used to denote a purpose corresponding to the English preposition *for*: *по воде* / *po vode* / '[to fetch some, go] for water', *по грибы* / *po griby* / '[to pick, go] for mushrooms', *по ягоды* / *po jagody* / '[to pick, go] for berries'. In this meaning the preposition is used with a limited number of nouns, and this function has been taken over by the preposition *za* with a change in government (Instrumental instead of the Accusative with *po*): *за водой*, *за грибами*, *за ягодами*. Among the other frequent usages with spatial reference are the following:

- i. some definite quantity of certain objects or events, in such instances as *по две*

таблетки три раза в день 'two pills three times a day', *по нескольким лекциям в неделю* 'several lectures a week', *по стакану молока* 'a glass of milk'. The preposition implies a multiplicity which can be expressed either as a multitude of subjects or a multitude of objects, thus in the following examples *по стакану молока* 'a glass of milk' implies either a glass of milk drunk by each of us (104a) or myself drinking a glass of milk repetitively which is marked by the iterative form of the verb (104b):

- (104) a. Мы выпили^{pf} по стакану молока
 We drink.PL.PAST *po* glass.DAT. milk.GEN.
 'We drank a glass of milk' (we=each of us)
- b. Я выпивал^{imp} по стакану молока
 I drink.SG.PAST *po* glass.DAT milk.GEN
 'I used to drink a glass of milk'
- c. По домам ходили^{imp} ряженые
po house.PL.DAT. walk.PL.PAST. mummer.PL.NOM
 'Mummers were visiting the houses'

The non-iterative form *выпил*^{pf} 'I drank' is impossible in (104b) with a single subject if the object is used with the preposition *po*.

ii. cause, reason, consequence, corresponding to the English *according to* or *after*, as in *по причине* 'on the account of', *по правилам* 'according to the rules', *по закону* 'in accordance with the law', *по справедливости* 'fairly' (i.e. in accordance with justice, fairness), *по одежке встречают*, *по уму провожают* 'one is greeted according to their clothes, and is seen off according to their wits' (a proverb). As an extension of this meaning one can

mention the cases of *по мотивам народной сказки* 'on the motives of the folk tale', *фильм по роману Голсуорси* 'a film on a Galsworthy novel'

Turning over to the temporal reference of the preposition *по* one can distinguish two distinct meanings. The first one with the Accusative has the directional meaning and denotes a period stretching over to and including a certain point, corresponding to the English *till, up to*, as in *по пятницу* 'up till Friday', *по двадцатое число* 'till the twentieth of the month'. The second meaning which occurs with the Dative of the nouns in the plural is that of a definite quantity of time intervals or dates with frequent or repetitive events, as in the following examples:

- (105) a. По пятницам мы играем^{imp} в теннис
 по Friday.PL.DAT. we play.1PL.PRES. in tennis.ACC.
 'On Fridays we play tennis'
- b. По воскресеньям магазины здесь не работают^{imp}
 по Sunday.PL.DAT. store.PL.NOM. here not work.3PL.PRES.
 'The stores are closed here on Sundays'
- c. По утрам я делаю^{imp} зарядку
 по morning.PL.DAT. I do.PRES. exercise.SG.ACC.
 'I exercise in the mornings'

In the latter usage the plural noun denotes a certain line, or string of points in time along which the event proceeds, i.e. the major spatial meaning is converted to time.

The usage of the prefix *по-* displays the same invariant meaning of the preposition *по* in three major references:

-spreading along a line/surface in space: *помазать*^{pf}/*pomazat'*/'spread', 'anoint', *постелить*^{pf}

- /postelit' / 'make a bed', *покрыть*^{pf} /pokryt' / 'cover, thatch', *потянуть*^{pf} /potjanut' / 'pull';
- spreading of the event until a certain point in perception: *подарить*^{pf} /podarit' / 'present, donate'; *посмотреть*^{pf} /posmotret' / 'look, take a look', *позвонить*^{pf} /pozvonit' / 'give a call, ring up';
 - spreading of the event inside a certain period of time, for some interval: *покурить*^{pf} /pokurit' / 'have a smoke', *посидеть*^{pf} /sit (for a while)', *поговорить*^{pf} /pogovorit' / 'have a talk'.

These may be considered the basic submeanings of the prefix *po-* closely related to the meaning of the corresponding preposition. They are the major predictable and discernible results one can expect when this prefix is added to an unprefix verb. The act of combining the meaning of a particular verb with the semantics of the prefix, however, may be slightly different, as the whole semantic potential of the verb is involved, including the meanings of the lexical aspects described in Chapter Three. Nevertheless, the basic invariant meaning of the prefix can still be related to that of the preposition, and certain further submeanings can be associated with the lexical class of the verb, see 5.3.

5.2.3.2 The prefix *s-* (*so-*).

The prefix *s-* (*so-*) is related to two homophonous prepositions. One of them is used with the Instrumental and corresponds to the English 'with', as in *с мамой* /s mamoj/ 'with mother', *с акцентом* /s aktsentom/ 'with an accent'. The related prefix is identifiable in such pairs as *брать*^{imp} /brat' / 'take' - *собрать*^{pf} /sobrat' / 'collect, gather', *стоять*^{imp} /stojat' / - *состоять*^{imp} /sostojat' / 'be a member, belong to, consist of', *летать*^{imp} /letat' / 'fly' -

слетаться^{imp} /sletat'sja/ 'get together by flying'. The preposition *s* 'with' preserves its lexical meaning in the related prefix and is not used with reference to time. For that reason it will not be considered in the present analysis.

The second preposition is used with the Genitive and corresponds to the English 'from, off (the surface)', as in *со стола* /so stola/ 'from the (top of the) table', *с востока* /s vostoka/ 'from the East', *с поверхности* /s poverxnosti/ 'from the surface'.

In the spatial reference the preposition denotes movement away from a plane, and in the more abstract spatial-temporal reference it denotes movement from a certain event, hence such usages as *с концерта* /s kontserta/ 'from the concert', *с конференции* /s konferentsii/ 'from the conference' etc.

In the temporal reference the preposition *s* denotes a period since some point of time, as in *с пятницы* /s pjatnitsy/ 'since Friday', *с октября по май* /s oktjabrja po maj/ 'from October till May'.

One must be aware of the important difference between the prepositions *po* and *s*. The former may be used both in the directional and the locative meanings in both spatial and temporal references whereas *s* has only the directional implication and may not be used to denote a locative semantic feature. Later (5.3) it will be shown to have a major impact on the usage of the related prefixes.

The prefix *s-* corresponding to the preposition *s* 'from' has basically the same range of references as the prefix *po-*, i.e. spatial, perceptive and temporal:

- removal of the event from a certain space or surface: *смазать*^{pf} /smazat/ 'smudge, smear';

скрыть^{pf} /skryt'/ 'hide, withhold', *стянуть*^{pf} /stjanut'/ 'pull off', 'steal';

- removal of the event from perception, completion of the event at some point in time: *спеть*^{pf} /spet'/ 'sing, finish singing', *сделать*^{pf} /sdelat'/ 'do, make, complete', *скурить*^{pf} /skurit'/ 'smoke down (to the butt)'.

As the prefix *s-* retains the invariant meaning of the preposition, including its directionality, a number of peculiar constraints and additional meanings of this prefix are related to this particular semantic feature (see 5.3).

5.2.3.3 The prefix *na-*.

The prefix *na-* corresponds to the preposition *на* which has the meaning 'on' when used with the Dative or 'onto' when used with the Accusative, i.e. it has both a directional and a locative meaning, cf. *на стол* /na stol/ 'onto the table', *на столе* /na stole/ 'on the table'. With a temporal reference the preposition denotes a direction towards a certain point in time, as in *задание на пятницу* /zadanije na pjatnitsu/ 'assignment for Friday', *на будущее* /na buduščee/ 'for the future', as well as occurrence of some event throughout some period, for example *работа на день* /rabota na den'/ 'a day's job', *остановиться на ночь* /ostanovitsja na noč/ 'stay for the night', *зайти на минуту* /zaiti na minutu/ 'drop by for a minute'.

The meanings of the related prefix *na-* can all be attributed to the spatial and temporal references of the corresponding preposition:

- spreading onto some area/surface in space: *налететь*^{pf} /naletet'/ 'fly/run into', 'attack', *набрести*^{pf} /nabresti'/ 'roam into', 'run into', *натянуть*^{pf} /natjanut'/ 'pull over',

- spreading of the event onto some surface in perception: *написать*^{pf} /napisat' / 'write, have something written', *нацарапать*^{pf} /natsarapat' / 'scratch something';

- spreading of the event in time onto the point of completion or above it: *нагреть*^{pf} /nagret' / 'heat, warm up', *надарить*^{pf} /nadarit' / 'give (a lot of presents)', *наговорить*^{pf} (*глупостей*) /say (a lot of foolish things)', *нагулять*^{pf} (*ребенка, аппетит*) 'get (a child, appetite) in the result of walking or loose behaviour, from *гулять*^{imp} 'walk, party'). The differences between the meaning of 'reaching a point of completion in time' and 'going beyond the point of completion in time' may be accounted for by the alloense of the preposition *на*, namely its meaning 'on, over'.

5.2.3.4 The prefix *za-*.

The prefix *za-* is related to the preposition *за* which corresponds to the English 'beyond, behind'. As in the previous instances, this preposition is used to denote both directions (with the Accusative) and locations (with the Instrumental) beyond or behind some object in space or beyond some limit in time, for example, *за дом* /za dom/ '[moving] behind the house', *за домом* /za domom/ '[being] behind the house'. The preposition implies some kind of a limit, or terminal point behind or beyond which the event may be directed or located, which may account for such usages in which the preposition corresponds to the English preposition 'for' and has the meaning of the purpose with the Instrumental as in *за водой* /za vodoj/ 'for some water, *в магазин за хлебом* /v magazin za xlebom/ 'to the store (to buy some) bread', and the meaning of the reason or cause with the Accusative, for example *платить за воду* /platit' za vodu/

'pay for the water', *драться за хлеб* /drat'sja za xleb/ 'fight for bread'.

In reference to time the preposition *za* is used with the Accusative to denote a period and corresponds to the English 'in (some time)', for example *за день* /za den'/ 'within a day', *за неделю* /za nedelju/ 'within a week', or with the relative reference, in such instances as *за день до каникул* /za den' do kanikul/ 'one day before the vacations', *за неделю до экзаменов* /za nedelju do ekzamenov/ 'a week before the exams'.

The meaning of the related prefix appears to have the invariant semantic feature of 'beyond/behind a limit' which is applied either to space or time. In the latter case the limit has become to be realised in many cases as the beginning of the event, consequently, with a vast number of verbs this prefix came to have an inchoative or ingressive meaning. There are instances, however, when the prefix carries both the temporal and the spatial reference with the same simplex verb, cf. the following examples:

(106) а. залетать^{pf} /zaletat'/ 'start flying around'

залетать^{imp} /zaletat'/ 'fly beyond or behind some point'

б. закидать^{pf} /zakidat'/ 'start throwing'

закидать^{pf} /zakidat'/ 'throw all over, beyond visibility'

в. завозить^{pf} /zavozit'/ 'start transporting'

завозить^{imp} /zavozit'/ 'transport to or beyond some point'

г. заговаривать^{imp} /zagovarivat'/ 'start speaking'

заговаривать^{imp} /zagovarivat'/ 'talk someone away from the point'

These examples show that all the semantic values of the related preposition can be potentially actualised when prefixation occurs.

5.2.3.5 The prefix *о-(ob-)*.

The prefix *о-(ob-)* is related to the preposition *о* which corresponds to the English ‘on, against’, and the preposition *вокруг* which corresponds to the English ‘around’, ‘about’, ‘all over’. This can be illustrated by the following examples: *споткнуться о камень* /spotknut'sja o kamen'/ ‘stumble on a rock’, *удариться о стену* /udarit'sja o stenu/ ‘hit oneself against the wall’, *разговаривать о погоде* /razgovarivat' o pogode/ ‘talk about the weather’, *просить о помощи* /prosit' o pomošči/ ‘ask for help’. The prefix seems to be related only to the second preposition, namely the meaning ‘about’, ‘all over’, cf. *обрадовать*^{pf} /obradovat'/ ‘please, make happy’, *осудить*^{pf} /osudit'/ ‘convict, condemn’. Unlike the prefixes and prepositions discussed above, the prepositions related to the prefix *о-(ob-)* are not used with reference to time. We are thus left only with spatial and perceptive reference, as in the following examples: *обмазать*^{pf} ‘spread, anoint all over’, *обтянуть*^{pf} /obtjanut'/ ‘pull all over’, e.g. stretch new material on furniture, or jeans over the legs, *осмотреть*^{pf} /osmotret'/ ‘look about, around, thoroughly’, *обкурить*^{pf} /obkurit'/ ‘smoke all over someone’, *обговорить*^{pf} /obgovorit'/ ‘talk over, discuss’. This meaning appears to be always present in derived verbs. It must be noted, however, that a number of prefixed verbs have become semantically distanced from the simple verbs and are now unanalysable into a root and a prefix, cf.:

(107) а. судить^{imp} /sudit'/ 'judge'

обсудить^{pf} /obsudit'/ 'discuss' and осудить^{pf} /osudit'/ 'convict, condemn'

б. деть^{pf} /det'/ 'put, stash'

одеть^{pf} /odet'/ 'dress', 'put on'

в. писать^{imp} /pisat'/ 'write'

описать^{pf} /opisat'/ 'describe'

5.2.3.6 The prefix *pro-*.

The prefix *pro-* corresponds semantically to the prepositions *через* /čerez/ 'across', and *сквозь* /skvoz'/ 'through'. The former is used with both spatial and temporal references, for example *через дорогу* /čerez dorogu/ 'across the road', *через лес* /čerez les/ 'through the wood', *через забор* /čerez zabor/ 'through (over) the fence', *через день* /čerez den'/ 'in a day'; 'every other day', *через три года* /čerez tri goda/ 'in three years, after three years'. The preposition *skvoz'* 'through' is only used with spatial reference.

The meaning of the preposition *через* /čerez/ 'through' is evident in most cases of the verbs with the prefix *pro-*, as in the following examples: *протянуть*^{pf} /protjanut'/ 'cover, stretch across', *просмотреть*^{pf} /prosmotret'/ 'look through', *прокурить*^{pf} /prokurit'/ 'spend quite some time smoking', *просидеть*^{pf} 'spend some time sitting', *проговорить*^{pf} 'waste some time talking'.

On the basis of the examples one can speak of three major uses of the prefix *pro-*:
- spreading of an event through some space, as in *протянуть*^{pf} /protjanut'/ 'pull, stretch

across', *пробить*^{pf} /probit'/ 'beat through' (e.g., a hole or an opening in the wall), *просверлить*^{pf} /prosverlit'/ 'drill through'; *проеварить*^{pf} /provarit'/ 'cook thoroughly'; - spreading of an event through a definite time period, as in *прокурить*^{pf} /prokurit'/ 'spend quite some time smoking', *посидеть*^{pf} 'spend some time sitting', *поговорить*^{pf} 'spend some time talking'; - spreading of the event through the whole of the perception act until its termination, as in *прослушать*^{pf} /proslušat'/ 'listen to the whole of, e.g., concert', *просмотреть*^{pf} /prosmotret'/ 'watch the whole of, e.g. show'. The additional meanings of these verbs 'fail to hear' and 'fail to see, notice' is also a regular meaning with a variety of verbs, cf. *играть*^{imp} /igrat'/ 'play' - *проиграть*^{pf} /proigrat'/ 'lose (in a game)', *пить* /pit'/ 'drink' - *пропить*^{pf} /propit'/ 'waste all one's money on drinks'. This meaning, in my opinion, should be attributed to the polysemy of the prefix *pro-* and in these cases to its correspondence to the preposition *mimo* 'past, by' which is also a regular meaning with a number of verbs: *пройти*^{pf} /proiti'/ 'pass by', *проехать*^{pf} /projexat'/ 'drive by', *пропустить*^{pf} /propustit'/ 'let someone by, miss, skip (e.g., a lesson)'.

5.2.3.7 The prefix *u-*.

The prefix *u-* partly corresponds to the preposition *u* 'by, at, near' (Istrina 1960:601) and is only used with spatial and perceptive references where it may have an additional meaning 'away, off', e.g. *убегать*^{imp} /ubegat'/ 'run away', *убрать*^{pf} 'take away, tidy', *усохнуть*^{pf} /usoxnut'/ 'wither away, dry up'. In some cases the prefix adds what Lubensky (1985:77) calls 'the meaning of punctuality', or in our interpretation, reference to perception. There are not

many verbs of this type, such as *yuidet'sya*^{pf} /uvidet'/ 'see, notice', *uslyšat'sya*^{pf} /uslyšat'/ 'hear'. In these cases the prefix *u-* has the same function as the prefixes *s-* and *po-*, but unlike these two, the use of the prefix *u-* is restricted to specific verbs. When the prefix and the related preposition are not used with temporal reference, they appear of little importance for the present analysis except presenting a functional synonym for the prefixes *s-* and *po-* with a stable distribution.

To sum up the consideration of the prefixes which are said to be capable of being pure perfectivisers, the following must be said. The prefixes are semantically very closely related to one or more prepositions which are used in reference to spatial relations, perception or, in some cases, to time relations. The prefixes apparently have a semantic invariant coinciding with meaning(s) of the related preposition (semantic invariants if they are related to more than one preposition), and are also used to modify the verb in spatial or temporal terms. The latter usage determines and enables the cognitive recategorization of some prefixes and allows them to combine with different Aktionsarten of the verb to produce a considerably limited amount of new meanings.

5.3 Aktionsarten and prefixes.

From the previous explanations it becomes evident that prefixes in Russian have two basic functions: (a) spatial or temporal modification of the event represented by the verb, and (b) representing an event as punctual in consciousness. In both cases prefixation of a simple imperfective verb creates the perfectivising effect. In the first case perfectivization is a side effect of the derivational process (Maslov 1961:167; Forsyth 1970:19) as spatial orientation

automatically places the subject of the event outside the event. In the second case perfectivization is the purpose of prefixation as no additional spatial characteristics are added to the base semantic image of the event but rather that basic image of an indiscriminate occurrence is presented 'wrapped up' to be viewed as a single entity. This mechanism, in my opinion, involves two prefixes - namely, the prefixes *s-* and *po-* which differ in function and consequently in the semantic result depending on the lexical aspect of the verb.

The prefix *s-* appears to 'wrap up' in consciousness kinetic determinate events represented by the verbs which may also have an indeterminate reading. The prefix *po-* punctualises in consciousness those events which are represented by indeterminate verbs or kinetic verbs which may have a stative reading. Let us consider these cases in detail beginning with the former.

In our investigation of the event-image development it was shown that the first aspectual distinction is between static and kinetic events. Verbs representing inherently static events were said to have a number of peculiarities which preclude their usage in certain grammatical forms, for example, stative verbs in English are unlikely to be used in the Progressive (**I am knowing*) whereas Russian stative verbs resist their usage with prefixes (**заснуеществовать* - *start existing). The feature of Statis was also said to be more characteristic of nouns, consequently, there is a limited number of verbs representing static events. It was also said that a number of verbs, especially in English, are unmarked for a lexical aspect in the lexicon, and acquire one when they are used in speech. In other words, lexical aspects may be a contextual category. i.e. a category of discourse rather than of tongue. For example, the verb *sing* is neither determinate (telic) nor indeterminate (atelic) in the lexicon, in the system of the language. This verb,

nevertheless, may have a telic (determinate) reading with a definite quantity of the event (*sing a song*), and an atelic (indeterminate) reading when the event is not quantified (*sing songs*, *sing like an angel*). The same applies to Russian verbs. Some of the verbs, for instance, the verbs of motion, have a morphologically marked contrast and are either determinate or indeterminate in the lexicon, in the language system, i.e. a certain lexical aspect is associated with each of those verbs in any of their forms. Other verbs are not marked for the Directional Aktionsart in the lexicon, and there is no morphological means that could refer those verbs to a definite lexical aspect. Such verbs may have either of the aspectual meanings related to a certain stage of event-image development. For example, the verb *stand* both in English and Russian may be ascribed the Stative Aktionsart when it is used with inanimate subjects, and the Non-Stative Aktionsart when it is used with animate subjects. In the first case the verb *stand* will display the properties of inherently stative verbs, i.e. verbs mentally marked for the Stative lexical aspect (108a), and would resist its usage with the Progressive in English and with prefixes in Russian (108b). In the second case the verb *stand* will not have such restrictions, as in (108c):

- (108) a. Thebes stood on the banks of the Nile.

Фивы	стояли ^{imp}	на	берегу	Нила
Thebes	stand.PL.PAST	on	bank.PREP.	Nile.GEN.

- b. *Thebes was standing on the banks of the Nile

*Фивы	постояли	на	берегу	Нила
Thebes	stand.PL.PAST	on	bank.PREP.	Nile.GEN.

- c. I stood/was standing on the banks of the Nile

Я	стоял ^{imp} /постоял ^{pf}	на	берегу	Нила
I	stand.SG.PAST	on	bank.PREP.	Nile.GEN.

We can consequently say that the verb *stand* in both languages is not marked for the Stative or the Non-Static Aktionsart in the lexicon, and can have either when used in discourse. The same applies to the lexical aspect in many other verbs. For example, the verb *eat* may have either a Determinate or Indeterminate aspect in discourse yet it does not have either of them in the lexicon. Moreover, in some cases the verb might lack this aspect even in discourse, remaining semantically unmarked for the Directional aspect. Compare the following Russian examples where the unprefix verb *eat* in Russian can be interpreted as either telic (109a) or atelic (109b):

- (109) a. Я ел^{imp} рыбу
I eat.SG.PAST fish.ACC.
'I ate/was eating the fish'

- b. Я ел^{imp}
I eat.SG.PAST
'I ate/was eating ', 'I was having a meal'

The same verb with prefixes demonstrates a quite different behaviour: the prefix *s-* only allows the telic, or determinate interpretation of the verb (110a) whereas the prefix *po-* suggests the atelic interpretation (110c):

- (110) a. Я съел^{pf} рыбу
I eat.SG.PAST fish.ACC.
'I ate/have eaten the fish'

- b. *Я съел^{pf}
I eat.SG.PAST

- c. Я поел^{pf} рыбы
I eat.SG.PAST fish.GEN.
'I ate/have eaten (some) fish', 'I had a meal of fish'

d. Я поел^{perf}
 I eat.SG.PAST
 'I ate/have eaten', 'I (have) had a meal'

If we consider example (110c) above, we can find several indications that the verb with the prefix *po-* has the Indeterminate lexical aspect: the use of the Genitive implies an indefinite quantity of the object, consequently, of the event. The Accusative is also possible in this case (*Я поел рыбы*) which would slightly modify the meaning: it would be best translated as 'I ate/have eaten some of the fish' with a possible implication that I was not meant to do it. This implication of the absence of telos and/or of end-point is even more clearly perceived if the subject is changed, cf. *Крысы поели рыбу* 'Rats (the rats) ate the fish'. The second indication is the possibility of the usage without an object, i.e. without quantifying the event, as in (110d). It is impossible in the case of the verb with the prefix *s-* (110b) which requires an object unless the object is explicitly expressed in the preceding context.

These considerations lead to the conclusion that for a number of verbs the lexical aspect is a contextual category, and they might have opposing interpretations. The semantics of the prefixes interplays with that of the lexical Aktionsart, either inherent or contextual, and contributes to the impression of greater polysemy of the prefixes when, in fact, it is a matter of the polysemy of the verb.

We are now in a position to assess the functioning of the aspectual prefixes in Russian, i.e. the use of the prefixes to specify a lexical Aktionsart which results in perfectivity of the imperfective verb after it is prefixed. The prefix *s-* is used with verbs which represent kinetic events in their determinate meaning, for example:

- | | |
|---|--|
| (111) а. <i>делать</i> ^{imp} /delat'/ 'do, make' | <i>сделать</i> ^{pf} /sdelat'/ 'make' |
| б. <i>играть</i> ^{imp} /igrat'/ 'play' | <i>сыграть</i> ^{pf} /sygrat'/ 'play' |
| с. <i>варить</i> ^{imp} /varit'/ 'cook, boil' | <i>сварить</i> ^{pf} /svarit'/ 'boil, cook'. |

The prefix *po-* is used with the verbs which represent a kinetic event either capable of being static or a kinetic event in its indeterminate meaning:

- | | |
|---|---|
| (112) а. <i>делать</i> ^{imp} /delat'/ 'do, make' | <i>поделать</i> ^{pf} /podelat'/ 'do' |
| б. <i>играть</i> ^{imp} /igrat'/ 'play' | <i>поиграть</i> ^{pf} /poigrat'/ 'have a play' |
| с. <i>варить</i> ^{imp} /varit'/ 'cook, boil' | <i>поварить</i> ^{pf} /povarit'/ 'boil, cook for a while' |

The addition of the prefix *po-* punctualises the event in time, hence an additional shade of meaning 'for a while, for some time' which is felt in these verbs.

Apparently, some events may not be semantically and morphologically marked for both the Determinate or Indeterminate lexical aspects. In this case it appears that the prefix *po-* is used to represent the totality of the event in consciousness, and the derivation by means of the prefix *s-* is impossible. Such verbs as: *подарить*^{pf} /podarit'/ 'present, donate', *похвалить*^{pf} /poxvalit'/ 'praise', *поглядеть*^{pf} /pogljadet'/ 'look, take a look, have a look' lack the shade of meaning 'for a while, for some time' which is characteristic of atelic (indeterminate) verbs.

There are a number of cases when the above general statement does not hold true. For example, in order to express a perfective event neither of the above prefixes are added, and a variety of other prefixes may be used instead. Such cases may be explained in three ways.

Some verbs seem to be following an old pattern and employ particular prefixes with

punctualising effect. For example, many verbs of perception, mental activity or emotions are used with the prefixes *u-* or *o(b-)*: *увидеть*^{pf} /uvidet'/ 'see', *устыдиться*^{pf} /ustydit'sja/ 'become ashamed' (the prefix *po-* is also possible with this verb'), *обрадовать*^{pf} /obradovat'/ 'please', *осмелеть*^{pf} /osmelet'/ 'get bold'. The preferential use of a different prefix to punctualise an event in consciousness may be connected to the special meaning of those verbs which unites them into semantic subclasses such as 'verbs of perception' etc.

Secondly, the perfectivisation with the prefix *s-* may be prevented by the existence of another verb with the same prefix which has a distinctly different meaning, cf. *читать*^{imp} /čitat'/ 'read' - *считать*^{imp} /sčitat'/ 'count' and 'opine, consider'. In such cases the prefix with a spatial meaning was reinterpreted in the derivational sense long before the prefix *s-* started to be used in the aspectual sense. In order to express a punctual event in these cases a different prefix is used which expresses the semantic function of the prefix *s-* and is devoid of its spatial or temporal reference: *прочитать*^{pf}.

Thirdly, there are instances when an event punctual in consciousness may be represented by any other prefix idiosyncratically because of the traditional usage, e.g. *пить*^{imp} /pit'/-*выпить*^{pf} /vyvit'/ 'drink', *писать*^{imp} /pisat'/ - *написать*^{pf} /napisat'/ 'write'. In such cases the prefixes *vy-* and *na-* may be treated as grammatical synonyms or aspectual variants of the prefix *s-* with the meaning 'determinate event punctualised in consciousness'. These prefixed verbs fit into the derivational aspectual paradigm as well as the regular formations with the prefix *s-* (Table 5.1.)

The first column of the verbs in the table is an imperfective which is unmarked for either

determinate or indeterminate aspect, the second column contains perfectives which are used to represent telic events, and the third column contains perfectives which are used to represent an indeterminate event. The use of different prefixes with determinate events (second column), consequently, must be attributed to a certain amount of variation which any language system has. Such variation, nevertheless, does not violate the general structure of the aspectual subsystems.

Imperfective	Determinate Perfective	Indeterminate Perfective	Translation
делать ^{imp}	сделать ^{perf}	поделать ^{perf}	'do, make'
просить ^{imp}	спросить ^{perf}	попросить ^{perf}	'ask'
греть ^{imp}	согреть ^{perf}	погреть ^{perf}	'heat'
рвать ^{imp}	сорвать ^{perf}	порвать ^{perf}	'tear'
писать ^{imp}	написать ^{perf}	пописать ^{perf}	'write'
читать ^{imp}	прочитать ^{perf}	почитать ^{perf}	'read'
пить ^{imp}	выпить ^{perf}	попить ^{perf}	'drink'
радовать ^{imp}	обрадовать ^{perf}	порадовать ^{perf}	'please'

Table 5.1. Aspectual derivation of the Directional.

5.4 Summary of the prefixes.

The Russian prefixes appear to have two major functions: providing spatial and/or temporal specification which turns an imperfective event into perfective as a consequence of that specification, except for those imperfective verbs which represent a habitual variety of repetitive

events. The second function is to specify the kind of the Directional aspect, either the Determinate or the Indeterminate, for those verbs which are not semantically marked for that aspect in the lexicon. The latter process is normally performed by the prefix *s-* to mark the Determinate and by the prefix *po-* to mark the Indeterminate. The prefix *s-* may have a number of functional synonyms, the so-called 'empty' prefixes which have a limited distribution and perform the same function with specific semantic classes of verbs or individual verbs, apparently, due to various historical reasons.

Some verbs which do not have the Directional in their semantic potential can only be used with one of the prefixes (*po-*), or may be prefixed with *s-* in its spatial meaning.

The verbs of motion which inherently are semantically marked for the Directional, only have the spatial and temporal meanings with the prefixes *s-* and *po-*.

The perfectivising role of the prefixes, therefore, comprises different derivational processes creating aspectual distinctions of the pre-Perspective level.

Chapter Six.

Aspectual subsystems of Russian.

In this chapter the subsystems of lexical aspects of Russian are presented which find their manifestation in the contrastive categories of the Perfective and the Imperfective. The chapter is structured in the following way. The problem of markedness is addressed in the first section. It is followed by suggestions concerning a stratified system of lexical aspects which comprise a cognitive space of binary oppositions in different dimensions as *potential* meanings. These meanings may be a property of the verb as a unit of language (tongue), or may be present in the semantics of verb forms in discourse as *actual* meanings, or may remain in the semantic potential without actualisation (6.2). This is followed by a brief analysis of various means of expressing the aspectual meanings and their interaction in Russian (6.3).

6.1 Russian aspects and markedness.

It is widely believed that the verbal system of Russian comprises the opposition of two aspects - perfective and imperfective. The category is treated as lexico-grammatical, since most verbs in any of their paradigmatic forms belong to either aspect.

The essence of the aspectual contrast, however, is difficult to describe in terms of a simple binary opposition as it appears that the semantic and functional potential of the aspects largely do not coincide. The Academy Grammar of Russian 1960, for instance, states that

the category of aspect denotes that the action expressed by the verb is presented a) in its duration, in the course of its performance, and thus in its duration or repetitiveness, e.g. *жить* /žit/ 'to live', *петь* /pet'/ 'to sing', *работать* /rabotat'/ 'to work', *ходить* /xodit'/ 'to go', *читать* /čitat'/ 'to read'; b) as limited, concentrated in some limit of accomplishment, be it the moment of

the appearance, beginning of the action or the moment of its completion, its result, e.g. *зaпеть* /zapet'/ 'to start singing', *кoнчить* /končit'/ 'to finish', *пoбeжать* /pobežat'/ 'to start running', *пpoпеть* /propet'/ 'to sing to the end', *пpийти* /prijti/ 'to come', *узнaть* /uznat'/ 'to find out', *уйти* /ujti/ 'to leave'.

The verbs denoting durative or repetitive actions, are called imperfective verbs; the verbs denoting an action at some moment of its completion, an action in its limit, in its result, are called perfective verbs (Istrina 1960:424, translation is mine - VV).

From the above definition one can conclude that the semantic range of the imperfective is totally different from the perfective. Besides, as Istrina adds in a note, "the meaning of completion, resultativity may combine with an image of its previous duration which can be seen from such verbs as *нaкупить* (*книж*) /nakupit' (knig)/ 'to buy (a lot of books), *oбoйти* (*вoкpyг дoмa*) /oboiti (vokrug doma)/ 'to walk (around the house)', *пoгулять* /poguljat'/ 'to take a walk, *пocпaть* /pospat'/ 'to sleep (for a while)', *пpoсидеть* (*всю нoчь*) /prosidet' (vsju noč')/ 'to stay up (all night)'. These verbs denote a durative, continuous action but it is presented in its completion, in its limit (and not in its progress) and thus refers to perfective verbs" (Istrina 1960:424).

The contrast between the two Russian aspects may consequently be described in terms of privative oppositions when "one term is defined positively, in terms of its essential and inherent meaning, and the other is defined negatively, as not inherently possessing the meaning of the 'marked' member, although it may nevertheless frequently express other meanings, and sometimes may even carry the meaning which is inherent in the 'marked' member" (Forsyth 1970:6). This approach was first outlined by Jakobson:

The asymmetry of a correlative grammatical form can be characterized as the

antinomy between the signalisation of A and the non-signalisation of A. Two signs may refer to the same objective reality, but the meaning of one of the signs singles out a certain mark (A) of this given reality, whereas the meaning of the other sign makes no mention of this mark (Jakobson 1984-[1932]:12).

The above explication implies that markedness can be observed on the semantic level as well as in morphology, i.e. the signalisation of some semantic entity may be correlated with a certain type of morphemes, or with the absence of such morphemes. In order to determine the marked status of either of the two Russian grammatical aspects, let us briefly review the semantic and the morphological markedness of the verbs in this language.

6.1.1 Semantic markedness.

In general terms, one can see two basically different approaches to the semantic treatment of Russian aspects. One of them is to summarize the distinction between the two in one comprehensive contrast, either negative or positive. The other approach attempts to contrast the two aspects by a number of related semantic features which may be predominant or optional for either of the aspects.

A typical example of the first approach is that of Forsyth who states that “a perfective verb expresses the action as a total event summed up with reference to a single specific juncture” (Forsyth 1970:8) while the imperfective is treated as the aspect which may denote anything else.

The second approach is exemplified by the work of Bondarko who treats aspectual contrasts in terms of “semantic potentials” consisting of the features Totality, Process(ness),

Temporal Localisation, Duration, Sudden Occurrence, Simultaneity and Sequencing (Bondarko 1971:12-15). All these features may have five values, not just a plus for the presence or a minus for the absence: 1) the feature has a constant, invariant expression with a certain aspect; 2) the feature may be expressed optionally; 3) the feature may be expressed under special conditions (arising from the lexical or syntactical context); 4) the non-expression of the feature may be restricted by special conditions; and 5) the expression of the feature is impossible (Bondarko 1971:12). The semantic potential of the aspectual contrast appears in the form of a matrix where all of the above-mentioned features are presented in different values for each of the aspects (Bondarko 1971:16).

A somewhat different approach is demonstrated by Comrie (1976). After discussing the category of markedness, he states that in many cases the criteria of markedness (semantic, morphological, statistical) conflict and "in general, morphological criteria are the least telling, since the morphology often reflects systematic correspondences of an earlier period in the history of a language" (Comrie 1976:111). For Slavonic languages Comrie postulates the markedness of the perfective:

The Perfective is the marked member of the Perfective/Imperfective opposition, but it cannot always be replaced by the Imperfective, i.e. the Perfective always has the perfective meaning, whereas the Imperfective may or may not have imperfective meaning (Comrie 1976:112).

In the present paper we shall presume the existence of the single contrast that underlies the aspectual contrast between perfective and imperfective verbs (the Perspective, see 3.2) while the actual verbal forms are treated in the complexity of their semantics as comprising several

subaspects, or as demonstrating the cumulation of lexical aspects indicated by different morphological means.

6.1.2 Morphological markedness.

The morphological markedness in Russian verbs is subject to quite contrary treatments. It is a commonly known fact that inherently, in the lexicon, Russian verbs are either perfective or imperfective with the exception of a limited number of bi-aspectual verbs (Istrina 1960:425; Skott 1979). But this binary opposition is blurred by numerous irregularities, and “although the majority of Russian verbs can be grouped in aspectual pairs, a considerable number cannot” (Forsyth 1970:32). There are imperfectives which lack perfective pairs, i.e. *бороться* /*borot'sja*/ ‘struggle’, *выглядеть* /*vygljadet*/ ‘look, seem’, *лежать* /*ležat*/ ‘lie’, or perfectives that lack an imperfective counterpart: *улизнуть* /*uliznut*/ ‘slip away’, *хлынуть* /*chlynut*/ ‘come rushing’ (Forsyth 1970:32). There are also multiple relationships (trios, quadruplets and whole families), such as

- (113) a. *вязать*^{imp} /*vjazat*/ ‘tie, bind’
 связать^{perf} /*svjazat*/ ‘tie, bind together’
 связывать^{imp} /*svjazyvaj*/ ‘tie, bind together’
 b. *расти*^{imp} /*rasti*/ ‘grow’
 вырасти^{perf} /*vyrastit*/ ‘grow up’
 вырастать^{imp} /*vyrastat*/ ‘grow up’ (Forsyth 1970:46)
 c. *бросить*^{perf} /*brosit*/ ‘throw’
 бросать^{imp} /*brosat*/ ‘throw, be throwing’

- брасывать^{imp} /brasyvat'/ 'throw (repetitively)'
- d. сказать^{pf} /skazat'/ 'say'
- сказывать^{imp} /skazyvat'/ 'say (habitually)'
- говорить^{imp} /govorit'/ 'say, speak'
- говаривать^{imp} /govarivat'/ 'say, speak (habitually)'
- e. кричать^{imp} /kričat'/ 'shout'
- крикнуть^{pf} /kriknut'/ 'shout (once)'
- крикивать^{imp} /krikivat'/ 'shout (repetitively)'
- покричать^{pf} /pokričat'/ 'shout (for a while)'
- покрикивать^{imp} /pokrikivat'/ 'shout (keep on shouting)'

Examples in (113) demonstrate that the number and variety of morphological means which are used to create the aspectual contrasts in Russian, is fairly big. It may be prefixation, suffixation, and a combination of the two. Besides creating a perfective or imperfective counterpart of the verb, these processes also considerably change the semantics of the base form adding the meanings and distinctions discussed in Chapter Three. The question then arises whether the different morphological means are used for different purposes (changing the aspect on the way) and whether it is possible at all to speak about morphological markedness of the perfective and imperfective aspects in Russian.

Here we also confront a lot of controversy. For example, Jakobson states that

The **classes of the verb** are formed by means of two "aspect correlations" and two "voice correlations".
 The general **aspect correlation** is "perfective" (marked) ~ "imperfective" (unmarked) (Jakobson 1984[1932]:3).

Contrary to the previous statement, Jakobson provides numerous examples when the

perfective verb stems lack some formative element present in imperfective stems: “all these differences in the form of the two correlative verbs display an iconic congruence with the opposition of their grammatical meanings. The perfective signalizes a limited extent of the narrated event, and correspondingly, a lesser number of phonemes characterises the pf. stem suffix” (Jakobson 1984 [1966]:28). In other words, what appears to be marked semantically (perfective) is unmarked morphologically in the stem, whereas a semantically unmarked member of the opposition (imperfective) is morphologically marked by stem-building suffixes. But even this statement does not appear to be always true. It is not true in the case of the punctualising suffix *-nu-* which turns imperfectives into perfectives:

- | | | | |
|-------|----|---|---|
| (114) | a. | курить ^{imp} /kurit'/ 'smoke' | курнуть ^{pf} /kurnut'/ 'have a smoke' |
| | b. | кашлять ^{imp} /kašljat'/ 'cough' | кашлянуть ^{pf} /kašljanut'/ 'cough (once)' |
| | c. | дёргать ^{imp} /djorgat'/ 'pull' | дёрнуть ^{pf} /djornut'/ 'give a pull' |

In these cases the perfective is marked both semantically, as indicated above, and morphologically by the nasal suffix.

When it comes to prefixation which presumably marks the perfective, we are confronted with the secondary imperfectives that are marked by the suffix *-va-/-i* or its allomorphs whereas

¹ The Academy Grammar of Russian distinguishes the unproductive suffix *-ва-* from modern productive suffixes *-ива-* (*-ыва-*) and from the productive suffixes *-ова-* (*-ева-*), *-ова-* which are used to derive verbs from nouns (Istrina 1960:432,543). Taking into account the semantics and the function of these suffixes we shall treat them all as allomorphs of the imperfective/iterative suffix *-va-* in order to preserve the integrity of the present analysis. This simplification may be justified by the fact that we are attempting to provide a synchronic description of the Russian verbal system whereas the morphological variations of the imperfectivising suffix should seek their explanation in the history of the language.

the prefixed perfective might be treated as unmarked. In the pairs of unprefixed imperfectives and prefixed perfectives (115a and 116a below), it is the latter which is morphologically marked. However, taking into account the lexical meaning of the prefix on the verbal form, the prefixed verbs make better pairs (115b, 116b), and in this case it is the perfective that remains unmarked while the imperfective is marked by the suffix:

- (115) a. кашлять^{imp} /kašljat' / 'cough' - покашлять^{pf} /pokašljat' / 'cough (for a while)'
 b. покашлять^{pf} /pokašljat' / 'cough (for a while) -
 покашливать^{imp} /pokašlivat' / 'cough (now and again)'
- (116) a. курить^{imp} /kurit' / 'smoke' - покурить^{pf} /pokurit' / 'smoke, have a smoke'
 b. покурить^{pf} /pokurit' / 'smoke, have a smoke' -
 покуривать^{imp} /pokurivat' / 'have a smoke now and again', 'be smoking'

Some groups of verbs, such as verbs of indeterminate movement, produce a homophonous aspectual pair when prefixed:

- (117) a. бегать^{imp} /begat' / 'run' сбегать^{pf} 'run and return' сбегать^{imp} 'run off'
 b. летать^{imp} /letat' / 'fly' слетать^{pf} 'fly and return' слетать^{imp} 'fly off'
 c. ходить^{imp} /xodit' / 'go' сходить^{pf} 'go and come back' сходить^{imp} 'go off';

There is also an important question of somewhat idiosyncratic behaviour of the aspect changing suffixes and prefixes. It appears that the punctualising (semelfactive) suffix *-nu-* can not be added to many verbs even in colloquial language:

- (118) a. читать /čitat'/ 'read' *читнуть
 b. спать /spat'/ 'sleep' *спануть
 c. сидеть /sidet'/ 'sit' *сиднуть

The so-called iterative imperfectivising suffix *-va-* and its allomorphs also demonstrate some kind of selective behaviour: they can be added to a limited number of unprefixed verbs both perfective and imperfective (119a) while in other cases they can only appear with the verbal stem in the combination with a prefix (119b and c):

- (119) a. деть^{pf} /det'/ девать^{imp} /devat'/ 'put, stash'
 дать^{pf} /dat'/ давать^{imp} /davat'/ 'give'
 кидать^{imp} /kidat'/ кидывать^{imp} /kidyvat'/ 'throw'
 сидеть^{imp} /sidet'/ сиживать^{imp} /sižyvat'/ 'sit'
- b. стоять^{imp} /stojat'/ *стаивать 'stand'
 простоять^{pf} /prostajat'/ простаивать^{imp} /prostaivat'/ 'stand around', 'be idle'
 настоять^{pf} /nastojat'/ настаивать^{imp} /nastaivat'/ 'insist',
- c. читать^{imp} /čitat'/ ?*читывать /čityvat'/ 'read'
 почитать^{pf} /počitat'/ почитывать^{imp} /čityvat'/ 'read (for while)'
 прочитать^{pf} /čitat'/ прочитывать^{imp} /čityvat'/ 'read (through)'

The fact that prefixation does not necessarily lead to perfectivisation (see examples 117) and that it is involved in intricate interrelation with perfectivising and imperfectivising suffixes (119) must lead to the conclusion that we can not speak about the perfective and imperfective as being morphologically marked or unmarked: the number of exceptions and

counterexamples to the claims of the markedness of either aspect is too big to be dismissed. At the same time we insist on the idea that both prefixation and suffixation represent aspectual differences of the pre-chronogenetic level, i.e. lexical aspects. Their possible hierarchy and structure is presented in the following section.

6.2 Lexical aspects as a multi-dimensional structure.

The claim that the meaning of the imperfective implies either a durative or an iterative event (6.1) suggests that these two meanings are the basis for the notion of imperfectivity which serves as an umbrella category uniting the two according to the cognitive feature they have in common. This feature was said to be the notion of the subject of the event inside the event (see 3.2). An imperfective verb, consequently, has the meanings of durativity and iterativity in the lexicon as its semantic potential, and when the verb is used in discourse, generally one of the meanings gets actualised. Imperfective Russian verbs, consequently, should normally be translated into English as implicating these two meanings, e.g. *пишут* 'be writing, write'. The context of the sentence will either actualise one of them (120a,b), or will allow for both interpretations (120c):

- (120) a. Я пишу^{imp} романы
 I write.1SG.PRES. novel.ACC.PL.
 'I write novels'
- b. Я пишу^{imp} письмо
 I write.1SG.PRES. letter.ACC.SG.
 'I am writing a letter'

- с. Я пишу^{imp}
 I write.1SG.PRES
 'I write/am writing'; 'I am a writer'

Similarly, a perfective verb incorporates the ideas of a punctual event, i.e. Semelfactive aspect, and an event which is punctualised in consciousness, i.e. non-semelfactive yet wrapped up in consciousness to a single entity, compare a semelfactive verb *крикнуть*^{pf} /kriknut'/ 'shout (once)' and non-semelfactive perfective *покричать*^{pf} /pokričat'/ 'shout (for a while)'.

We might therefore postulate the existence of a hierarchy of aspectual distinctions in Russian with the Inherent aspect being at the foundation of it and every other level being another dimension which may be realised and actualised in the verb or may remain unspecified. The system comprises several levels and a binary contrast at each of them. The semantics of the verbs may be analysed as progressing from the verbs which are unmarked for perfectivity or imperfectivity, i.e. biaspectual verbs of the type *судить* /sudit'/ 'judge, try', *женить* /ženit'/ 'marry' as having only the Inherent lexical aspect, i.e. their ability to identify an event of a certain nature, the type of the event. When put into the context of the utterance, these verbs may acquire either a perfective (121a) or imperfective (121b) reading:

- (121) а. Завтра Симпсона судят
 Tomorrow Simpson.ACC. judge.3PL.PRES.
 'They will try Simpson tomorrow', 'Tomorrow is Simpson's trial'

- б. Симпсона судят уже два года
 Simpson.ACC. judge.3PL.PRES. already two year.SG.GEN
 'They have been trying Simpson for two years'.

The following Diagram 3 illustrates the structure of lexical aspects and the different levels. It reflects the main differences between different types of lexical aspect. Level One represents Inherent aspect. The Inherent was described in Chapter Three (3.2.1) as the lexical identifier of the event. It is the type of aspect which notional words have in common, for example *to shoot, a shot, shooting* have the same lexical aspect which identifies a definite type of events. It is thus impossible for a verb not to have any Inherent aspect in the lexicon except for auxiliaries.

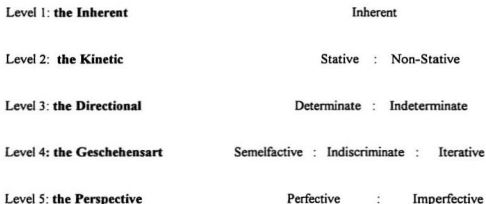


Diagram 3.

The second level of the lexical aspects is created by the opposition between the representations of static and non-static (kinetic) events and corresponds to the cognitive image of the presence or absence of movement or change. Verbs representing static events can not form any aspectual distinctions other than those of imperfectivity and continuous, indiscriminate occurrence. If the verb is marked for the Stative in the lexicon, it can not form aspectual distinctions

by means of the prefixes, or be involved in the suffixational derivation. This is the case of a very limited number of verbs, such as *know*, *exist*, *be*, *belong*. Other verbs might have a static reading in a particular context, and in this case they behave morphologically in the same way as the verbs inherently marked as stative in the lexicon. Otherwise, the same verbs have a kinetic reading and may be modified by means of prefixes and suffixes. Cf. the example with the verb *stand* in 5.3 where the verb in the sentence *Thebes stood on the banks of the Nile* can be added neither suffixes nor prefixes whereas the verb in the sentence *I stood on the banks on the Nile* can be modified in the following ways: *nocmojur^{pf}* /postojal/ 'stood for a while, was standing', *nocmauean^{imp}* /postaival/ 'used to stand (for some time)', *npocmauean^{imp}* /prostaival/ 'used to stand for a long time'.

The third level of aspectual semantics comprises the opposition between determinate and indeterminate verbs, i.e. the lexical distinction described as the Directional in 3.2. In Russian and non-Southern Slavic languages the morphological contrast between determinate and indeterminate verbs involves only a small group of the verbs of motion. These verbs must be presumed to be semantically marked for the Directional in the lexicon. The overwhelming majority have the determinate and indeterminate meanings as potential which may be revealed in the context of an utterance. A number of verbs may have the contrast when one adds the prefixes *s-* and *po-* which mark the verb as either determinate or indeterminate, as in *cnem^{pf}* and *nonem^{pf}* 'sing'. Not surprisingly, these prefixes do not have the same effect with the verbs of motion which are already semantically marked for the Directional in the lexicon: the prefix *s-* preserves its spatial meaning with both determinate and indeterminate verbs of motion, e.g.

cnememʹ^{pf} /sletet'/ 'fall off' - *cnemamʹ*^{imp} /sletat'/ 'be falling off', and the prefix *po-* acts as a marker of the inchoative with determinate verbs of motion and punctualises the event in consciousness with indeterminate verbs of motion, e.g. *nonememʹ*^{pf} /poletet'/ 'set into flying, start flying' - *nonemamʹ*^{pf} /poletat'/ 'fly for a while', for more details see 6.3.4.

Yet another group of verbs may not have a contrast between the determinate and the indeterminate reading if there is no morphological contrast created by the two prefixes, e.g. *uymumʹ*^{imp} /šutit'/ 'joke' - *nouymumʹ*^{pf} /pošutit'/ 'tell a joke' - **cuymumʹ*. Such verbs may be said to lack the notion of the Directional aspects in their semantic potential.

The last two levels of Aktionsart semantics correspond to the cognitive features of Manner of the Occurrence and the position of the subject of the event. The latter category is represented by the distinction between Perfective aspect and Imperfective aspect. The Perfective and the Imperfective are not necessarily present in the verbs as units of lexicon. Examples on page 207 indicate that some verbs receive the perfective or imperfective interpretation only in the context of an utterance. It means that such verbs only have the Inherent lexical aspect but they can potentially be either perfective or imperfective.

The Perfective is most closely associated with the possible cognitive representation of the punctual event at the fourth level, i.e. with the cognitive feature of the Manner of the Occurrence. The lexical aspects of the fourth level serve to represent an event as punctual in *perception*, i.e. the Semelfactive, or as punctual in *consciousness*. Any event represented by a perfective verb may consequently be either. For example, the perfective verb *brocumʹ* /brosit'/ 'throw, abandon' may have a punctual, or semelfactive reading with concrete objects, as in

бросить камень /brosit' kamen'/ 'throw a stone', and a non-semelfactive reading, i.e. representing a punctual event in consciousness, as in *бросить курить* /brosit' kurit'/ 'quit smoking'. This last event could have been spread through a significant time period and is not necessarily begun and finished within the time span of one perceptive act. The verb *бросить* in the lexicon, consequently, is not marked for the lexical aspect arising at the fourth level, but it can acquire one in the context of an utterance.

Similarly, Imperfective aspect serves as the umbrella category comprising the notions of continuity and iterativity. An imperfective verb can be marked for the two notions in the lexicon, as, for example, unprefixed verbs with the suffix *-ыва-* are marked for iterativity (*скажyвать* /skazyvat'/ 'say', *хажyвать* /hažyvat'/ 'go', *нашyвать* /našyvat'/ 'carry'), normally in the habitual sense. An imperfective verb may also be unmarked for the lexical aspects representing the manner of occurrence, and the two lexical aspects of this level become contextually dependent categories. For example, *читаю* /čitat'/ 'read' may represent either a continuous event (122a), or an iterative event in perception (122b) in response to the question *What are you doing*, or it may represent an iterative event in consciousness, i.e. a habitual event (122c) in response to the question *What do you do in the evenings*:

- (122) a. Я читаю^{imp} книгу
 I read.1SG.PRES. book.SG.ACC
 'I am reading a book'
- b. Я почитываю^{imp} книгу
 I read.1SG.PRES. book.SG.ACC
 'I read the book (now and again)'

с. Я читаю^{imp} книги
 I read.1SG.PRES. book.PL.ACC
 'I read books (habitually)'

The use of the imperfective verb nearly always implies either continuity, uninterruptedness or repetitiveness and habituality except when verbs are used to represent the Inherent. These two meanings linger in the semantic potential of any imperfective verb, and are normally disambiguated by the linguistic or situational context.

We may postulate that the morphological potential of Russian verbs, i.e. their ability to combine with certain prefixes and suffixes is entirely determined by the interaction of the lexical aspects, and is a result of various markedness values for certain levels of aspects. In other words, verbs may be inherently marked in the lexicon for aspects of every level, or they may be marked for only one level, with the possibility of acquiring one of the aspects of a lower level as an actual meaning in discourse.

6.3 Analysis of the aspectual subsystems of Russian.

Now we are in a position to analyse the aspectual distinctions of Russian and the morphological means for their expression. The description of the different levels, though correlated with the stages of the event-image development, will begin with the discussion, first, of the Inherent followed by the Perspective, the *Geschehensarten*, the Directional and the Kinetic. The description will follow the same pattern: first the existence of a verbal subclass morphologically and/or semantically marked for the respective aspectual level will be established. This is followed by a discussion of the morphology used to express the same aspectual distinctions with verbs

not inherently marked for the aspect of that level. In other words, the description begins with the most representative class of verbs which have the lexical aspect as their actual meaning in the lexicon, and proceeds to the description of verbs which are not marked for that aspect in the lexicon but may render the same aspectual distinctions in discourse, or by means of derivational morphology.

6.3.1 Inherent Aspect.

The most representative class of verbs to mark the Inherent are the biaspectual verbs such as *казнить* /kaznit' / 'execute'. These verbs only denote a certain type of event and do not have any other aspectual information in the lexicon. In discourse, however, these verbs may act as either perfectives or imperfectives, i.e. they have the notion of the Perspective in their semantic potential.

Besides a very limited number of biaspectual verbs there are no special finite forms to represent merely the occurrence of some event. What corresponds to the English simple forms are the finite verbal forms of either perfective or imperfective aspect semantically marked in the lexicon. However, when these verbs are used to convey the notion of the Inherent, the distinction between the two Russian aspects is blurred and lurks only as a potentiality of interpretation. To illustrate this point, the verbs in Forsyth's (1970:5) examples below are supplied with variants of the other aspect. Even though the verbs in brackets have the opposite aspect, they make perfect sense and can substitute the original forms without changing the meaning of the sentences:

- (123) a. Кто покупал^{imp} (купил^{pf}) эти билеты? - Я
 Who buy.SG.PAST these ticket.PL.ACC. - I
 'Who bought these tickets - I did'
- b. Вы получили^{pf} (получали^{imp}) моё письмо? - Нет, не получал^{imp} (получил^{pf})
 You.PL receive.PL.PAST my letter.SG.ACC. No not receive.SG.PAST
 'Did you get my letter? No, I haven't got it (didn't get it)'
- c. Вы будете покупать^{imp} (купите^{pf}) эту шляпу? *
 You.PL be.2PL.PRES. buy.INF. (buy.2PL.PRES.) this hat.ACC.'
 Will you buy (are you going to buy) this hat?
- d. Пожалуйста, уходите^{imp} (уйдите^{pf}) -
 Please go.IMPER.2PL.
 'Please, go away'

As noted by Forsyth (1970:5), "in none of these sentences is there any question of repetition, nor is there any reference to the duration of the action in time", i.e. none of the meanings typically associated with the semantics of the imperfective verbs. The function of the imperfective verbs here, according to Forsyth, is "simply to name the type of action, to identify it lexically, along with the grammatical meaning of the form concerned - past tense, future tense, imperative etc. - but without reference to perfectivity" (Forsyth 1970:6) and this is equally well done by perfective verbs.

The disappearance of the contrast between perfective and imperfective verbs in certain cases is noted and explained by many authors. Bondarko (1991:76-77), for example, speaks of the generalised-factual meaning of the imperfective aspect comparable to the concrete-factual meaning of the perfective in the following instances:

(124) а. Вам об этом докладывали^{imp}?
 You.PL.DAT. about this.PREP. report.PL.PAST
 'Has it been reported to you?'

б. Вам об этом доложили^{pf}?
 You.PL.DAT. about this.PREP. report.PL.PAST
 'Has it been reported to you (Did they report it to you)?'

In such cases "the speaker is simply interested in expressing the bare fact that such and such event did take place, without any further implications, and in particular without any implication of progressive or habitual meaning" (Comrie 1976:113) which can be illustrated by the waiter's question *Вы уже заказывали*^{imp}? /vy uže zakazyvali/ 'Have you already ordered?' (Comrie 1976:113). The question does not imply either progressive or habitual meaning and just enquires for the occurrence of the event.

6.3.1.1 Counterexamples.

The synonymy of the two verbs in rendering the 'factual' meaning, i.e. stating the occurrence of the event, is evident most frequently in interrogations when the very occurrence of some event is requested whereas any other aspectual information is irrelevant. Bondarko insists that the two aspects are competing in the usages as in (124) above because the perfective has the feature Totality (Limitedness) whereas the imperfective lacks this feature which makes it possible in those contexts. This would not explain why the perfective and imperfective verbs do not so easily interchange when a reference is made to the present moment. Bondarko's above

examples in such case would imply quite different meanings:

- (125) а. Вам об этом докладывают^{imp}?

You.PL.DAT. about this.PREP. report.PL.PRES.

'Is it (being) reported to you?'

- б. Вам об этом доложат^{pf}?

You.PL.DAT. about this.PREP. report.PL.NON-PAST

'Will it be reported to you (Will they report it to you)?'

Another case where verbs of different aspect can not be used interchangeably is in narration regardless of the time of reference. Here the substitution of the imperfective verb by the perfective will lead to a considerable semantic reshaping of the whole narrated event or events. For example, the substitution of the perfective verbs in (126) by imperfective verbs would necessarily imply the typical meanings of the imperfective, i.e. the phrase should be translated either as a string of continuous or repetitive events, i.e. *I was waking up, washing myself, dressing etc.*, or *I used to wake up, wash, dress etc.*

- (126) Я встал, умылся, оделся и пошёл на работу
I wake up.SG.PAST wash.SG.PAST dress.SG.PAST and go.SG.PAST to work.ACC.
'I woke up, washed, dressed and went to work'

Our explanation of the counterexamples is based on the following assumption. In the absence of a special form for rendering the meaning of the Inherent (similar to the simple tense forms of English) this function is performed by either Russian morphological aspect. However, the temporal reference of the non-past restricts their usage: since imperfective non-past forms strongly imply the present time-sphere and perfective non-past forms necessarily denote a future,

this semantic contrast precludes the substitution of one aspect by the other when an explicit reference is specifically made to present time. If the present time sphere is not implied, i.e. if the event is referred to the non-past which includes the future, the contrast between the perfective and imperfective verbs again becomes neutralised (see 121c and 127) as the contrast present/future might often be not at issue. In such cases imperfective verbs in the present and the so-called future (periphrastic form) may be used interchangeably stating (naming) the event, i.e. conveying the semantics of the Inherent:

- (127) a. Женщина, вы берете^{imp} платье?
 woman.NOM. you.PL. take.2PL.PRES. dress.ACC
 'Madam, are you taking (=buying) the dress'
- b. Женщина, вы будете брать^{imp} платье?
 woman.NOM. you.PL. be.2PL.NON-PAST take.INF. dress.ACC
 'Madam, will you buy/are you buying the dress'

The non-actualisation of the aspectual semantics other than that of the Inherent as well as the time reference (either future or present) is notable in the indiscriminate usage of perfective (a) and imperfective (b) verbs of motion to refer to the future event in (128)–(129):

- (128) a. Завтра я поеду^{pf} в Москву
 Tomorrow I go.1SG.NON-PAST to Moscow.ACC
 'Tomorrow I am going/will go to Moscow'
- b. Завтра я еду^{imp} в Москву
 Tomorrow I go.1SG.PRES. to Moscow.ACC
 'Tomorrow I go to Moscow'

- (129) a. Маша прилетит ^{pf} во вторник
 Masha fly.3SG.NON-PAST in Tuesday.ACC.
 'Masha is flying/will fly (in) on Tuesday'
- b. Маша прилетает ^{imp} во вторник
 Masha fly.3SG.PRES. in Tuesday.ACC.
 'Masha flies (in) on Tuesday'

It might also be argued that despite the obvious synonymy the use of the imperfective (i.e. present reference) implies more imminency than the use of the perfective (which generally has a future time reference), which can be illustrated by the announcements at railway stations:

- (130) a. Поезд из Ромашково прибудет ^{pf} на первый путь
 Train.NOM. from Romashkovo arrive.3SG.NON-PAST on first track.ACC.
 'The train from Romashkovo will arrive at Platform One'
- b. Поезд из Ромашково прибывает ^{imp} на первый путь
 Train.NOM. from Romashkovo arrive.3SG.PRES. on first track.ACC.
 'The train from Romashkovo is arriving at Platform One'

The first announcement is made as soon as the platform at which the train will arrive becomes known, often well before it is due. The second announcement is heard as the train may actually be observed approaching the station.

These slight distinctions connected to the parts of the non-past time sphere, nevertheless, do not undermine our claim that they demonstrate the Inherent aspect expressed by either perfective or imperfective verbs.

The expression of the Inherent in reference to the present time is restricted due to the

strong interference regarding the different time reference expressed by non-past perfective and imperfective verbs. With future or past reference, however, there are hardly any restrictions on the use of either to denote the Inherent meaning.

The impossibility of the substitution of a perfective verb by an imperfective one in narration (126), on the other hand, may be caused by the fact that narration introduces a situational context within which other aspectual distinctions play a role, i.e. narration provides a necessary background of sequencing which highlights the distinction between the perfective and imperfective. The narration thus does not concentrate on just naming the events, it has a representation of the event in the variety of its aspectual representations.

We may conclude that it is apparently the common semantic property, the same Inherent aspect shared by the two grammatical aspects, the Perfective and the Imperfective, that allows them to perform the function of naming an event, stating its occurrence. In fact, the two aspects are semantically equal and are not opposed in this usage. It is a separate question that the two different forms, due to a variety of other usages, may carry subconscious realisation of those other usages, i.e. the potential interpretation as perfective versus imperfective with reference to immediate present and in narration.

6.3.2 The Perspective.

The Perspective is used as a generic name for the aspects arising out of the cognitive images of the subject of the event placed either outside the event or being situated inside the event. The linguistic correspondence to the first image is the Perfective, and the correspondence

to the second image is the Imperfective. Very often this semantic opposition is treated as the only grammatical aspectual opposition in Russian. In this thesis it is presumed to be the highest level of verbal aspectual distinctions since the Inherent provides *lexical* rather than *grammatical* oppositions. The level of the Perspective reflects a more abstract cognitive image which incorporates the cognitive images that emerged at the previous stages of the event-image development. This incorporation results in the extreme semantic complexity of the Perspective in Russian. If a researcher attributes all the complexity to the Perfective and the Imperfective, the resulting analysis is very likely to become cumbersome and inconsistent for a number of reasons. The lexical aspects of the previous stages make up subsystems of their own and are not necessarily present in every verb which falls under the category of perfective or imperfective. Some of the earlier aspectual distinctions, such as determinate or indeterminate, in fact, can be applied to both the aspects of the Perspective level with some verbs but not others. Rather than attempting to describe the whole of the semantics which a perfective or imperfective verb *can* relay, we shall limit ourselves to the properties of the Perspective proper, i.e. the cognitive image of the external or internal subject and the consequences for the verbal paradigms when these images are transposed on Universe Time.

6.3.2.1 The Perspective and time reference.

The aspectual distinctions arising at the cognitive level of the Perspective are the first distinctions which can serve the purpose of temporal reference. It is common knowledge that languages may have no tenses yet in this case they are bound to have distinctions similar to

the perfective / imperfective contrast (Binnick 1991:44; Comrie 1985:63). The separation of the subject of the event from the event provides the possibility of a semantic expansion of the perfective (1) as a non-present if the event with an interior subject is perceived as present, and (2) expansion into the notions of temporal relativity, or anteriority, in which case the exterior subject signals the anterior event whereas the interior subject is interpreted as the later stage of affairs. This actually entails that cognitively the imperfective and perfective aspects create the first temporal contrast which ought to be the opposition “present vs. non-present”, and that the emergence of the ‘relative’ time reference precedes the cognitive notions of Universe Time. Tenseless languages reveal this property of the Perspective to the full extent. For example, in modern Chinese

le suffixe de l’accompli *-le* marque la fermeture d’un processus (...) et indique l’antériorité par rapport à un repère donné, antériorité qui est relative. Il peut ainsi exprimer l’antériorité d’une action par rapport à une autre action (passée ou future), la première étant perçue comme une circonstance de la seconde (Iljic 1986:26).

The universality of the cognitive properties of the Perspective is also manifest in Russian where perfective verbs only have reference to the non-present and are used in narrations where every preceding verb is viewed as anterior to the following ones. The imperfective, on the other hand, allows for a representation of the continuous event due to the image of the subject being inside the event, either in the present or non-present time spheres.

As the Perfective and the Imperfective are lexical aspects in Russian, i.e. they emerge at the stage preceding the notions of Event Time and Universe Time, they facilitate and precondition the development of the latter notions. However, the peculiar properties of the

Perspective lead to dramatic developments in the system of tenses. We shall take a closer look at the reasons of why the system of Russian tenses is what it is. But first about the way this system is usually described in Russian grammars.

Russian imperfective verbs may have reference to the past, present and future while perfective verbs can only refer to the future and the past. Traditionally, Russian is believed to have five tenses, a simple one with perfective verbs and a periphrastic form with imperfective verbs, as illustrated in Table 6.1.

	Past	Present	Future
Perfective	сделал /sdela-l/		сделаю /sdela-ju/
Imperfective	делал /dela-l/	делаю /dela-ju/	буду делать /budu delat'/'

Table 6.1 Time reference of the perfective and imperfective verbs (temporal paradigm of the of the verb *делать* 'do').

The existence of the lexical perfectivity/imperfectivity contrast creates a considerable asymmetry whereby the transposition of the perfective or imperfective verb to Universe Time creates very different images, especially in the non-past sphere: the perfective verb may not have the present-time reference in the non-past whereas the imperfective verb primarily implies continuity and, consequently, present time. The solution to remedy this considerable discrepancy was provided by the creation of the analytic Prospective aspect by means of the non-past of the verb 'to be' whereby this perfective form has future reference, and the infinitive of the

imperfective verb carries the image of uninterruptedness, e.g. *буду делать* /*budu delat'*/ 'I will be doing'.

Taking into account the morphological identity of marking the present imperfective *делаю* and the future perfective *сделаю* it is logical to treat these forms as non-past, and the future imperfective form *буду делать* as an analytical aspectual construction representing Prospective aspect (Hewson - personal communication) which emerges at the Chronogenetic level similar to English where the Prospective emerges at the Chronogenetic level alongside the Retrospective and the Progressive (see Chapter One). Once this form is treated as aspectual rather than as a tense form, the system of two tenses, Past and Non-Past, may be presented as follows:

	Past	Non-Past
Perfective	сделал / <i>sdela-l</i> /	сделаю / <i>sdela-ju</i> /
Imperfective	делал / <i>dela-l</i> /	делаю / <i>dela-ju</i> /

Table 6.2 The system of Russian tenses.

This kind of representation presents the system of tenses in Russian as a symmetrical structure and can find confirmation in the possibility of interchangeable usage of the perfective and imperfective non-past for rendering the Inherent (see examples 123c,d, 124, 127): this possibility can only be accounted for by the fact that the cognitive space of Universe Time has only two fields, and the future is rendered in Russian by means of either Perfective or Prospective

aspect. The non-past segment of Universe Time necessarily includes the future, and it is only with a direct and specific reference to the present moment that imperfective and perfective verbs can not be used interchangeably (see example 118).

6.3.2.2 The Perspective and quasi-nominals.

Another set of phenomena which is the result of the aspectual distinctions of the Perspective level are the non-finite forms of Russian verbs. The separation of the subject of the event from the event precludes the formation of the present perfective active participle as it would imply the idea of the subject inside the event (Table 6.3).

	Infinitive	Past Participle Active	Present Participle Active
Perfective	сделать /sdela-t'/	сдела-вш-ий /sdela-vš-ij/	-
Imperfective	дела-ть /dela-t'/	дела-вш-ий /dela-vš-ij/	дела-ющ-ий /dela-jušč-ij/

Table 6.3. The system of active participles in Russian.

The passive participles show a similar constraint (Table 6.4): only the past perfective and the present imperfective participles are possible.

	Infinitive	Past Participle Passive	Present Participle Passive
Perfective	сделать /sdela-t'/	сдела-нн-ый /sdela-nn-yj/	-
Imperfective	дела-ть /dela-t'/	-	делает-м-ый /dela-j-em-yj/

Table 6.4. The system of passive participles in Russian.

The presence of the Perspective as a lexical property of words has created a situation which requires some modification of the Guillaumean treatment of quasi-nominals. In Chapter One it was stated that the emergence of Event Time provides for the possibility of three representations: one interior representation (the subject inside the event) as in *singing*, and two exterior representations *sung* and *(to) sing* which in turn are distinguished by the linear representation of the subject: preceding the event in the case of *(to)sing* and following the event in the case of *sung*. This feature of interiority or exteriority of the subject is incorporated into the lexical semantics of the Russian verbs as units of the lexicon; thus the infinitive of the imperfective verb has the same property as the present and past participles (the subject inside the event) whereas the perfective infinitive has the same property as the participles of the perfective verb (the subject outside the event). This means that the contrasts between Russian quasi-nominals have a different nature compared to English or French quasi-nominals. This different nature may account for the tense contrast between the imperfective participles: *делавший* /delavšij/ 'doing in the past, having done' and *делающий* /delajuščij/ 'doing (now)' and the existence of a separate set of passive participles *сделанный* /sdelannyj/ '(having been) done' and *делаемый* /delajemyj/ 'being done'. One may argue that the systems of French and English have a more universal and abstract character which allows for both passive and active interpretation of the Retrospective participle: *has eaten, is eaten*. Russian verbs with a significant semantic load of various aspectual distinctions lack this level of abstraction. This required a more complicated system of quasi-nominals. The fundamental difference between English and Russian quasi-nominals is also confirmed by the marginality of Russian participles: they are almost entirely

confined to official style and written language whereas vernacular Russian would normally replace them with phrases containing finite forms.

The problem of the representation of both Event Time by quasi-nominals and of Universe Time by finite forms in Russian is intriguing and needs further investigation in the Guillaumean paradigm. However, this problem lies outside the scope of the present thesis which focuses on the subsystems of lexical aspects and the cognitive images underlying them.

6.3.2.3 Semantic potential of the Perspective.

Both the aspects of the Perspective level have semantic undertones which can not be subsumed by one universal contrast as they are caused by the fact that the Perspective summarily reflects the distinctions which arise at the preceding level of the event image development, namely, distinctions in the Manner of Occurrence. The semantic potential of an imperfective verb implies either an uninterrupted, indiscriminate, continuous occurrence, or an iterative, habitual, frequentative occurrence. The semantic potential of the perfective verb, on the other hand, implies either a Semelfactive event (event begun and completed in perception) or a Non-Semelfactive event (event completed in consciousness). If these meanings are attributed to the properties of the Perfective and Imperfective, the resulting analysis will have to admit that the two aspects are opposed in a variety of ways which would entail a number of privative or equipollent oppositions without systemic relations between them. For example, the Imperfective may be said to have the semantic feature "Continuous", or "Durative" which is absent in the Perfective. The latter, in its turn, may be said to possess the semantic feature "Totality" which

the Imperfective lacks. This kind of descriptive analysis fails to underscore the simple system which stands behind the aspectual categories. Thus the semantic properties of perfective and imperfective verbs other than the position of the subject of the event should be related to another level of aspectual distinctions where they comprise a subsystem of their own. The following section will consider this subsystem.

6.3.4 The *Geschehensarten*.

The term *Geschehensarten* was introduced in Chapter Three as a generic term for the aspectual distinctions corresponding to the cognitive features of the Manner of Occurrence. Earlier in the thesis (see 3.2.4) it was argued that the operations of generalisation and particularisation produce three cognitive images in which the occurrence of the event can be perceived: punctual, repetitive and uninterrupted. The linguistic lexical aspects corresponding to these images were said to be the Semelfactive, the Iterative and the Indiscriminate. The participation of long-term memory and imagination might lead to the development of the cognitive images so that a series of homogeneous events over several perceptive acts may be perceived as a single repetitive event resulting in the notions of the Habitual or Frequentative, whereas the beginning, duration and completion of an event perceived through several perceptive acts may be realised in memory as a punctual event in consciousness producing the notion of Non-Semelfactive.

Russian verbs have a number of subclasses which demonstrate morphologically marked *Geschehensarten*. Alongside with verbs unambiguously referred to one of the *Geschehensarten*,

there is a large number of verbs which have the meanings of this level in their semantic potential and have one of the three possible interpretations as discourse categories. The analysis of the *Geschehensarten* will proceed with the most representative groups of verbs followed by the review of those verbs which have *Geschehensart* semantics as a potentiality.

6.3.4.1 The Semelfactive.

The Semelfactive verbs are normally marked by the suffix *-ну/-nu/-*. There exists a large number of verbs in which the semelfactive form shows considerable phonetic reshaping such as vowel change, consonant deletion or alteration no longer active in Russian. These verbs are opposed to the suffixless imperfective verbs which have exactly the same basic lexical meaning, i.e. the Inherent aspect identifying the same type of event but differing in aspectual value, cf.:

- | | | |
|----------|---|---|
| (131) a. | совать ^{imp} /sovət'/ 'put, poke, stash' | сунуть ^{pf} /sunut'/ 'put once' |
| b. | кидать ^{imp} /kidat'/ 'throw' | кинуть ^{pf} /kinut'/ 'throw once' |
| c. | плевать ^{imp} /plevat'/ 'spit' | плюнуть ^{pf} /pljunut'/ 'spit once' |
| d. | вздыхать ^{imp} /vzdyxat'/ 'sigh' | вздохнуть ^{pf} /vzdoxnut'/ 'give a sigh' |

Apparently, this derivational type reflects a very old pattern of forming aspectual distinctions. There is, however, a limited number of verbs with the suffix *-ну-* which are imperfective and in most cases denote a transition to or being in a new state, for example:

- (132) a. гнуть /gnut'/ 'bend'
 b. гибнуть /gibnut'/ 'perish'
 c. мёрзнуть /mʲorznut'/ 'freeze, feel chilly'
 d. тонуть /tonut'/ 'sink, drown'
 e. меркнуть /merknut'/ 'dim'
 f. пахнуть /paχnut'/ 'smell'

This group of imperfectives with the suffix *-m-* includes almost exclusively intransitive verbs which could be traced to iteratives as representations of a single act of the corresponding iterative verb recategorised in regard to *Geschehensart*, e.g. *тонуть* /tonut'/ 'sink, drown (intransitive)' from *тониуть* /topit'/ 'sink (transitive)' as a single act of something or somebody's drowning, or *меркнуть* /merknut'/ 'dim' from *мерцать* /mertsat'/ 'shimmer, glimmer' as a single act of glimmering which ends in dimming, putting out. This is a historical analysis, however. In modern Russian these verbs exist as independent lexical entities, and are not exactly the aspectual semelfactive counterparts to the iterative verbs. For that reason this group of imperfectives with the suffix *-m-* is treated as a case of systemic irregularity and is excluded from the subclass of the Semelfactive verbs.

The important constraint on the derivation of the semelfactives with *-m-* is that they can only be derived from verbs which represent perceptually repetitive events, for example:

- | | |
|--|---|
| (133) a. дуть ^{imp} /dut'/ 'blow' | дунуть ^{pf} /dunut'/ 'blow once' |
| b. чихать ^{imp} /čixat'/ 'sneeze' | чихнуть ^{pf} /čixnut'/ 'sneeze once' |
| c. кашлять ^{imp} /kašljat'/ 'cough' | кашлянуть ^{pf} /kašljanut'/ 'cough once' |

- d. дёргать^{imp} /djorgat'/ 'pull at' дёрнуть^{pf} /djornut'/ 'pull once'
 e. прыгать^{imp} /prygat'/ 'hop up and down' прыгнуть^{pf} /prygnut'/ 'hop once, leap'

The suffix *-nu-* is much more frequent in colloquial language than it is in the dictionaries and standard literary Russian. Colloquial Russian derives semelfactives even from those verbs which are not inherently marked for iterativity and do not represent repetitive events in perception but can be presumed to comprise a number of identical acts in consciousness, i.e. repetitive in habitual sense. For example, the verb *воспитать*^{pf} /vospitat'/ 'educate, bring up, raise' denotes an event which may consist of a number of acts all of which are aimed at rearing a child. The possibility of this cognitive image can account for the following example:

- (134) Надо сбегать к родителям Митьку воспитнуть^{pf}
 Necessary run.INF. to parents.DAT. Mitya.ACC. rear/raise.INF.
 "I have to drop by at my parents' to give Mitya parental guidance"

The phrase was uttered by a college lecturer to her equally educated friends to inform them she would be off to exert a single act of parental influence on her son who was staying with his grandparents. The verb *воспитнуть*, not found in any dictionary, is a natural formation and the above example is by no means abnormal though it is rather informal.

The colloquial language also employs the suffix *-anu-* /-anu-/ for the purpose of punctualisation which is emotionally and stylistically marked. This suffix, unlike the suffix *-nu-*, can be added to verbs of any *Geschehensart*, both perfective and imperfective, cf.:

- (135) a. давать^{imp} /davat'/ 'give' давануть /davanut'/ 'give'
 b. сказать^{pf} /skazat'/ 'say' сказануть /skazanut'/ 'say'
 c. чесать^{imp} /česat'/ 'comb' чесануть /česanut'/ 'comb'

The adding of the suffix *-anut-* normally creates a comic effect which can be attributed to the cognitive discrepancy between the nature of the event represented by the unprefixed verb and the meaning of punctuality: the suffix gives a punctual meaning to the verbs that have a regular form to represent a single act, such as the verb *даны*^{pf} for (135a), or the verbs that are already inherently punctual (135b), or those verbs which can hardly be interpreted as punctual (135c).

The second group of verbs with the Semelfactive *Geschehensart* are simple unprefixed perfective verbs which are morphologically marked by the infinitive inflexion *-уть (-ть)* and have an imperfective pair marked by the infinitive inflexion *-ать (-ять)*:

- (136) a. бросить^{pf} /brosit'/ бросать^{imp} /brosat'/ 'throw'
 b. лишить^{pf} /lišit'/ лишать^{imp} /lišat'/ 'deprive'
 c. простить^{pf} /prostit'/ прощать^{imp} /proščat'/ 'forgive'
 d. пустить^{pf} /pustit'/ пускать^{imp} /puskat'/ 'let'
 e. родить^{pf} /rodit'/ рождать^{imp} /roždat'/ 'give birth'
 f. хватить^{pf} /xvatit'/ хватать^{imp} /xvatat'/ 'grab', 'be enough'
 g. явить^{pf} /javit'/ являть^{imp} /javljat'/ 'appear, present'

Though synchronically one can not say which of the two in the pair is derived, it is noteworthy that the imperfectives have an inherently Iterative aspect. We may consequently

conclude that the Semelfactive is primarily related to the Iterative, the relationship one can expect from a binary opposition which is a result of the operations presented by the binary tensor (see 3.4.1).

6.3.4.2 The Iterative.

The verbs most representative of Iterative aspect are unprefixes verbs with the suffix *-ива-* (*-ыва-*)/-iva- (-yva-)/ which have an unprefixes imperfective counterpart without this suffix, such as the verbs in (137). These verbs carry all the implications of the repetitive Manner of Occurrence, i.e. they may be interpreted as either iterative, habitual or frequentative:

- | | | |
|----------|--|--|
| (137) a. | сидеть ^{imp} /sǐdet'/ 'sit' | сизивать ^{imp} 'sit (habitually)' |
| b. | водить ^{imp} /vodit'/ 'lead' | важивать ^{imp} /važivat'/ 'lead (repeatedly)' |
| c. | кричать ^{imp} /kričat'/ 'shout' | крикивать ^{imp} 'shout (now and again)' |

As was the case with the punctualising suffix *-и-*, the iterative suffix *-ива-* (*-ыва-*) with unprefixes verbs is much more frequent in colloquial speech, especially in rural areas. The following verbs may not be registered in the dictionaries but they are natural and regular formations, although they are somewhat marked as emotional and informal, peculiar to the vernacular:

- | | | |
|----------|---|---|
| (138) a. | лежать ^{imp} /ležat'/ 'lie' | лѣживать /ljoživat'/ 'lie (occasionally)' |
| b. | летать ^{imp} /letat'/ 'fly' | лѣтывать /ljotyvat'/ 'fly (occasionally)' |
| c. | слышать ^{imp} /slyšat'/ 'hear' | слыхивать /slyxivat'/ 'hear (regularly)' |
| d. | говорить ^{imp} /govorit'/ 'talk' | говаривать /govarivat'/ 'talk (usually)' |

The same suffix with prefixed verbs also usually carries the Iterative (the so called perfective iteratives): *почты́вать* /počityvat'/ 'read regularly'; *посапы́вать* /posapyvat'/ 'snore now and again'. However, many prefixed verbs with this suffix have Iterativity as a potential and contextually dependent meaning, i.e. they have the *Geschehensart* in their semantic potential and are only marked for the imperfective in the lexicon, e.g. *забрасыва́ть* /zabrazyvat'/ 'throw beyond (repeatedly), score (a goal)'. This group also includes the majority of verbs with the suffixes *-ова-*, *-ева-*, *-ова-* and *-ва-*. These suffixes produce an imperfectivising effect and open the possibility of interpreting the verb as having either Iterative or Indiscriminate (continuous) lexical aspect: *арестова́ть* /arestovat'/ 'arrest', *презентова́ть* /prezentovat'/ 'present' etc. The verb *arrest* used to be bi-aspectual and has undergone a normal evolution into becoming perfective after the imperfective counterpart *арестова́ывать* /arestovyvat'/ appeared to denote the activity of arresting in its continuity and/or repetition.

The encompassing category of the Perspective level often dominates the *Geschehensart* distinctions and it is often difficult to determine whether the verb has Iterative or Indiscriminate aspect in the lexicon. I could suggest a test for determining iterativity as the inherent property of the verb: an iterative verb would normally resist being used in the context of *В тот момент, когда*, for example:

- (139) а. В тот момент, когда я забрасывал^{imp} шайбу...
 In that moment when I throw.SG.PAST puck.ACC.
 'When I was scoring the goal'

b. *В тот момент, когда я почитывал^{imp} книгу...
 In that moment when I read.SG.PAST book.ACC.

c. В тот момент, когда я читал^{imp} книгу...
 In that moment when I read.SG.PAST book.ACC
 'When I was reading the book'

The verbs in (139a) and (139c) may denote an evolving continuous event at a certain moment which makes them natural in the suggested context. The verb in (139b) is marked for repetitiveness in the lexicon, and a series of identical occurrences can not happen within just one moment which makes the verb inappropriate in this context. The test, however, may not be applicable to the verbs which represent events whose natural occurrence requires a considerable period of time, such as *зимовать* /zimovat' / 'spend winter', *ночевать* /nočevat' / 'spend the night'. For such verbs the test context might be modified to include the minimum time period necessary for one uninterrupted occurrence, i.e. *that winter, that (very) night*.

6.3.4.3 The Indiscriminate.

The Indiscriminate *Geschehensart* corresponding to the cognitive feature of uninterrupted occurrence does not appear to have special morphological marking. This lexical aspect can only be found in imperfective verbs with reference to one perceptive act, or to one uninterrupted period of time. If the represented event is spread through several perceptive acts or throughout several segments of time, the verb may be interpreted as having Iterative lexical aspect in its habitual or frequentative variety, cf.:

- (140) а. Я жил^{imp} в этой квартире три месяца (в детстве)
 I live.SG.PAST in this flat.PREP. three month.SG.GEN. (in childhood.PREP.)
 'I lived in this flat for three months (last year, when young)'
- б. Я жил в этой квартире каждое лето (на каникулах)
 I live.SG.PAST in this.PREP. flat.PREP. every.ACC. summer.ACC. (on vacation.PL.PREP.)
 'I lived/used to live in this flat every summer (on my vacations)'

The verb *жил* 'I lived' represents an uninterrupted occurrence when a single period of time is specified, such as *last year, for three months, when I was young*. However, when the context contains an indication of several time sequences, e.g. *on every vacation, every summer, whenever I visited the town* etc., or a multitude of intervals, the verb may be interpreted as expressing the Iterative (habitual). Similarly, the verb *болею*^{imp} /*boleju* 'am sick' in (141a) implies the Indiscriminate while in (141b) the modified temporal context gives the verb a habitual reading:

- (141) а. Я болею гриппом
 I be-sick.SG.NON-PAST influenza.INSTR.
 'I am down with a flue'
- б. Я болею гриппом редко (каждую зиму)
 I be-sick.SG.NON-PAST influenza.INSTR. seldom (every winter.ACC.)
 'I seldom have flue' ('I have flue every winter')

Verbs which are unmarked for the Punctual or Iterative even in their habitual usage carry an implication that the event occupied all the duration of every interval of time expressed in the context. In (140b) the event of living continued uninterrupted throughout each summer of the vacation period, and (141b) presupposes a singular uninterrupted occurrence throughout each winter. In other words, morphologically unmarked verbs capable of expressing the

Indiscriminate imply the idea of continuity even when they refer to several occurrences of the same event. Under no conditions can they be used to denote a purely iterative event, i.e. an intermittent event in perception.

The possibility of the habitual or frequentative interpretation makes us conclude that the Russian verbs unmarked for *Geschehensarten* have the meanings of the Iterative and the Indiscriminate as potentiality of contextual interpretation, while the Indiscriminate is always a discourse category incapable of being a property of the verbs as units of tongue.

6.3.4.4 Summary of *Geschehensarten*.

The expression of the *Geschehensarten* reveals a number of morphologically marked verbs for the Semelfactive (suffix *-nu-*) and the Iterative (suffix *-iva/-yva*) with the Indiscriminate being morphologically unmarked. The majority of the verbs that do not have explicit marking of *Geschehensarten* must be presumed to have them as a potentiality of interpretation. Such verbs can be used in discourse and can be analysed as capable of covering the meaning of more than one *Geschehensart*.

6.3.5 The Directional.

The Directional corresponds to that stage in the event-image development at which the notions of the determinate and indeterminate movement appear. Determinate movement proceeds in a definite direction and implies an end-point, or the point of saturation (completion, termination) as an entailment. Indeterminate movement is unstructured, unordered movement

and implies the idea of random repetition.

The Directional has a morphological expression in Russian imperfective verbs of motion (see the list of them in 3.2.3.1) The same lexical aspect is expressed by some prefixed verbs with the prefixes *s-* and *po-*. In this case the prefixes lack the spatial or temporal reference described in 5.3.

6.3.5.1 The Directional and the verbs of motion.

The verbs which are inherently marked for the Directional and have a morphological pair with the contrasting aspect display significant peculiarities in their morphological behaviour evident in both suffixation and prefixation.

The iterative suffix *-iva-(-yva-)* can only be added to indeterminate verbs, for example:

- (142) a. ходить /xodit'/ 'go' хаживать /xaživat'/ 'go habitually'
b. катить /katit'/ 'roll' катывать /katyvat'/ 'roll repeatedly'
c. носить /nosit'/ 'carry' нашивать /našivat'/ 'carry habitually'

Determinate verbs are unable to convey the idea of repetitiveness, so it may be said that the Iterative lexical aspect can not combine with the meaning expressed by the Determinate.

The second peculiarity involves prefixation. Prefixed determinate verbs all become perfective while indeterminate verbs may have doublets: a prefixed imperfective form with the same spatial modification as the determinate prefixed verb and a prefixed perfective verb with a different meaning. This is illustrated on the example of the prefixed forms of the determinate

verbs *идти* /*idti*/ 'go' and *лететь* /*letet*/ 'fly' and the corresponding indeterminate verbs *ходить* /*xodit*/ 'go' and *летать* /*letat*/ 'fly' (Table 6.5).

Perfective Determinate		Imperfective Indeterminate		Perfective Indeterminate	
зайти 'drop by'	залететь 'fly in'	заходить 'drop by'	залетать 'fly in'	заходить 'start going'	залетать 'start flying'
пойти 'start going'	полететь 'start flying'			походить 'walk awhile'	полетать 'fly awhile'
сойти 'go off, step from'	слететь 'fly off, from'	сходить 'go and return'	слетать 'fly and return'	сходить 'go off, step from'	слетать 'fly off, from'
дойти 'reach' 'come up' '	долететь 'fly up to' '	доходить 'come up' '	долетать 'fly up to' '		
уйти 'go away'	улететь 'fly away'	уходить 'go away'	улетать 'fly away'		
отойти 'go aside'	отлететь 'fly aside'	отходить 'go aside'	отлетать 'fly aside'		

Table 6.5. Prefixed determinate and indeterminate verbs.

One can see from the table that the prefixes *do*, *u-* and *ot* perform a purely spatial modification. Three prefixes: *za-*, *s-* and *po-* produce a peculiar effect. The prefix *za-* adds an inchoative meaning to indeterminate verbs while with determinate verbs it only has a spatial reference. The prefix *po-* adds inchoative meaning to determinate verbs and is actualised with temporal reference in indeterminate verbs. The prefix *s-* has the spatial meaning with both groups yet with indeterminate verbs it also creates an unusual meaning of a single completed action which may be expressed as 'move and return'.

The idiosyncratic behaviour of the latter three prefixes can be explained by their specific semantics and functions discussed in 5.2.3 and 5.3. These prefixes may be used with both spatial and temporal reference. In the case of the latter the prefix *za-* was interpreted as 'behind (the beginning of the event)', or inchoative. This meaning remains with indeterminate verbs, while for the determinate verbs the same meaning is conveyed by the prefix *po-*. The unusual meaning 'move and return' of the prefix *s-* may be explained in two ways: either it is a different prefix related to the homophonous preposition *s* 'with', or it may be the punctualising effect of the implication of repetitiveness contained in the indeterminate verb: a single perceptive act of a repeated phenomenon would imply a return to the starting point.

6.3.5.2 The Directional with other verbs.

Besides the verbs of motion that can form aspectual pairs in the lexicon a large number of Russian verbs may be presumed to have the semantics of the Directional in their semantic potential. The presence of these potential meanings is revealed by the derivational possibility for unprefixing verbs to create perfective pairs with the prefixes *po-* and *s-* (or its equivalent with no spatial or temporal reference, see 5.3). In these cases the unprefixing verb is semantically unmarked for either the Determinate or Indeterminate but contains the possibility of being interpreted in either meaning. The prefixes actualise one of the Directional meanings and in this case the verb with the prefix *s-* becomes nearly identical in aspectual semantics to the verbs inherently marked for the Determinate, such as the English *make*. The verb with the prefix *po-* becomes an aspectual equivalent to the verbs inherently marked for the Indeterminate, such

as the English *do*. Compare the following examples where the Russian verb *do* can have both a telic and atelic reading (143) whereas the prefixed forms show some kind of selectivity. With the prefix *s-* the verb acquires a distinct determinate meaning with the result that the English translation requires us to specify a definite quantity of the event (*the mistakes, the homework*) to render the same idea of the inner terminal point (144). With the prefix *po-* the verbs acquire a distinct indeterminate meaning. This leads to the impossibility of representing the first event: one can not say **поделать ошибки* /*podelat' ošibki*/ just as one can not say *do mistakes* in English: making a mistake is perceived as a determinate event which has an implication of the end-point which can not be presented by an indeterminate verb as lacking that internal point of termination. The verb *поделать* sounds as odd in this context as the English *I was making mistakes* in response to the question *What did you do yesterday?*

(143) а. *дeлaть*^{imp} oшибки /*delat' ošibki*/ 'make mistakes'

б. *дeлaть*^{imp} уроки /*delat' uroki*/ 'do homework'

(144) а. *сдeлaть*^{pf} oшибки /*sdelat' ošibki*/ 'make the mistakes'

б. *сдeлaть*^{pf} уроки /*sdelat' uroki*/ 'do (finish) the homework'

(145) а. **пoдeлaть*^{pf} oшибки

б. *пoдeлaть*^{pf} уроки /*podelat' uroki*/ 'do homework (for some time)'

The possibility of creating aspectual perfective pairs opposed in their Directional meaning does not seem to be the property of all Russian verbs. Some verbs can not be provided with

the prefixes marking the Directional (146). Many verbs can be marked with this prefix but it retains its distinct spatial reference (147). Yet in other instances the prefixed verb has a totally different Inherent lexical aspect which can hardly be related to the unprefixed form in synchronic terms (148). For such cases we presume that these verbs do not have the meanings of the Directional Aktionsart in their semantic potential, consequently, the meanings of the Determinate and Indeterminate can not be actualised in discourse.

- | | | | |
|-------|----|---|---|
| (146) | a. | гулять ^{imp} /guljat' / 'walk' | *сгулять |
| | b. | родить ^{pf} /rodit' / 'give birth' | *сродить |
| (147) | a. | рубить ^{imp} /rubit' / 'chop' | срубить ^{pf} /srubit' / 'chop down' |
| | b. | трясти ^{imp} /trjasti' / 'shake' | стрясти ^{pf} /strjasti' / 'shake off' |
| (148) | a. | пасти ^{imp} /pasti' / 'herd' | спасти ^{pf} /spasti' / 'save' |
| | b. | мыться ^{imp} /myt' sja / 'wash' | смыться ^{pf} /smyt' sja / 'slip away, disappear' |

The derivational patterns of the verbs similar to those in (146) - (148) require a separate investigation since such verbs may comprise several subclasses:

- "Determinate only" verbs which have a temporal reference and the inchoative meaning with the prefix *po-*, e.g. *полюбить*^{pf} /poljubit' / 'begin loving';
- "Indeterminate only" verbs which may have the meaning 'for some time' with that prefix, e.g. *погулять*^{pf} /poguljat' / 'walk for a while';
- verbs unmarked for the Directional which merely denote a completed perfective event

with the prefix *po-*, e.g. *породить*^{pf} /porodit'/ 'give birth', and

- verbs marked for both kinds of the Directional differ in some of their allosemantic usages; for example, the verb *чистить*^{imp} /čistit'/ 'clear, clean' may have an interpretation of an atelic event going on for some time as in *почистить*^{pf} *снего* /počistit' sneg/ '(clean) shovel the snow (for a while)', or it may have an interpretation of a telic event bound to come to its end-point and unable to have the meaning 'for a while', as in *почистить*^{pf} *картошки* /počistit' kartoški/ '(clean) peel potatoes'.

In order to establish the kind of Directional with verbs other than verbs of motion the following procedure may be suggested. In the preceding section it was noted that determinate verbs of motion get inchoative meaning with the prefix *po-*, and indeterminate verbs of motion become inchoative with the prefix *za-*. The inchoative meanings of these prefixes may serve as an indicator of the Determinate or the Indeterminate carried by the particular verb. For example, the verb *любить* 'love, be in love' has the inchoative meaning with the prefix *po-*: *полюбить*. Some verbs such as verbs of mutation *белеть* /belet'/ 'be/turn white/pale', *зеленеть* /zelenet'/ 'be/turn green' may have two inchoatives, e.g. *трава зазеленела* /trava zazelenela/ 'the grass became green' and *я позеленел (от злости)* /ja pozelenel (ot zlosti)/ 'I turned green (with anger)'. Other similar verbs, i.e. *краснеть* /krasnet'/ 'be/turn red' have only one inchoative: *покраснеть*. We can consequently conclude that the verb *зеленеть* has both directional meanings as a semantic potentiality whereas the verb *краснеть* is semantically marked for the Determinate.

6.3.6 The Kinetic.

The Kinetic Aktionsart was described in Chapter Three as the level of aspectual distinctions corresponding to the cognitive image of either stasis or non-static (kinetic) events, the stage at which the notion of movement is realised as spatial/temporal change of some entity on the background of unchanging, constant entity. The property of denoting stasis was said to be more characteristic of nouns and adjectives but verbs might also have the Stative lexical aspect, even though the number of these verbs may be very small.

Russian has no special morphological markings for verbs denoting static events. This subclass of verbs may be determined by the derivational potential, or the ability of the verbs to be spatially or temporally modified. Once the Stative represents an event which does not change, the spatial or temporal modification of such an event is impossible. Any spatial or temporal modification would entail reference to a different static entity, consequently, a different event altogether. One can not place a static unit in a new spatial context just as one can not modify the co-ordinates of a geographical point: *London, Ont.* can not refer to the capital of the United Kingdom. This means that the addition of spatial prefixes would create an image of a new event rather than modify the environment of the static event. Russian simple verbs which display exactly these qualities are the verbs *знать* /znat'/ 'know', *быть* /byt'/ 'be', *иметь* /imet'/ 'have', *существовать* /suščestvovat'/ 'exist'. All these verbs are imperfective. These verbs acquire a new meaning when prefixed, i.e. prefixation creates a new lexical entry, a verb with a different Inherent aspect (149).

- (149) а. знать /znat'/ 'know' признать /priznat'/ 'admit'
 познать /poznat'/ 'learn' зазнаться /zaznatsja/ 'become cocky'
 узнать /uznat'/ 'find out'
- б. быть /byt'/ 'be' забыть /zabyt'/ 'forget'
 прибыть /pribyt'/ 'arrive' убыть /ubyt'/ 'depart, decrease'
 сбыть 'sell, deliver'
- в. иметь /imet'/ 'have' иметь /zaimet'/ 'acquire'
 поиметь /poimet'/ 'use, dispose'

The only prefix which could be added to some of these verbs without changing the Inherent is the prefix *pro-* with its temporal reference, i.e. stressing a complete period of time throughout all of which the occurrence of the static event went on (150):

- (150) а. быть /byt'/ 'be' пробыть /probyt'/ 'be, stay the whole time'
 просуществовать /prosuščestvovat'/ 'exist' (the whole of the time indicated')

The description and identification of the inherently stative verbs might seem to be an easy undertaking. The overwhelming majority of the verbs might consequently be said to be marked for the Non-Static and to denote kinetic events. However, the ability of some verbs to have the Kinetic type of lexical aspect as a potentiality contributes to a number of phenomena similar to the ones described above. Just like in the case of the other levels of aspectual distinctions, some verbs may not be inherently marked for only one aspect of the Kinetic level and may

allow for both interpretations. The aspectual meanings of the Kinetic type of aspect can be actualised in discourse, and the verbs in their static reading should behave derivationally similar to the purely stative verbs such as *be*, *have* etc.:

- (151) a. Том лежал^{imp} на диване
 Volume.NOM lie.SG.PAST on sofa.PREP.
 'The volume was (lying) on the sofa'

b. *Том полежал^{pf} на диване

- (152) a. Том лежал^{imp} на диване
 Tom lie.SG.PAST on sofa.PREP.
 'Tom was lying on the sofa'

b. Том полежал^{pf} на диване
 Tom lie.SG.PAST on sofa.PREP.
 'Tom lay on the sofa (for a while)'

These examples indicate that the verb *лежать* /*ležat'* / 'lie' has both the meanings of the Kinetic type of aspect in its semantic potential. In (151) the verb denotes a static event (151a) and can not be modified by the prefix (151b), while in (152) the verb denotes a non-static event and can be used with the prefix *po-* in its temporal reference (152b).

6.4 Summary of Russian lexical aspects of the pre-chronogenetic level.

This sketchy analysis of the system of lexical verbal aspects of Russian suggests some general conclusions. The lexical aspects of each level except the Perspective constitute a limited subsystem of verbs which are marked in tongue either morphologically or semantically, for

example, determinate verbs of motion marked for the Determinate. They can be considered the most representative of the corresponding lexical class. For other verbs there exist three possibilities: (1) semantic markedness for one of the aspects revealed through derivational paradigms, for example the Determinate aspect of the verb *love*; (2) semantic markedness for a certain type of aspect as a potentiality of actualisation of both the kinds of aspect in discourse, as is the case with the verb *lie* which is potentially marked for the Kinetic and can be actualised as both Stative (144a) and Non-Stative (145a); or (3) verbs can be semantically unmarked for the lexical aspects of a certain level when there does not exist any morphological contrast revealing the meanings of the that level, for example, the majority of Russian verbs may be said to be unmarked for the Kinetic.

There appears to be an interesting interrelationship between the morphological and/or semantic markedness of the verb for a certain type of Aktionsart and the possibility of combining with Aktionsarten of the other levels. Verbs which are semantically marked for the Stative, for example, can only be interpreted as indeterminate, indiscriminate and imperfective. Non-Stative verbs, or verbs not marked for the Kinetic may acquire any of the aspects of the higher levels of aspectual distinctions. Similarly, verbs of motion marked for the Directional can only be indiscriminate and imperfective while the verbs that lack morphological marking for the Directional and are not opposed to the verbs of the other aspect of this level may have any of the aspects of the following levels.

Conclusions.

The present thesis was based on the theories of Gustave Guillaume and his followers, and the theory of aspect most comprehensively presented in Hewson & Bubenik 1997. An attempt was made in this thesis to hypothesize the existence of a certain *pre-chronogenetic* level at which various aspectual meanings arise. The cognitive approach to aspectual distinctions based on Guillaumean principles makes possible the elaboration of a finite list of lexical aspectual meanings and the search for their origin in the cognitive activity of the human mind. The multi-dimensional space of aspectual semantics was shown to begin with the mental separation of the perceiving subject and the perceived reality. The realisation of the event occurring outside the thinking individual leads to the establishment of the cognitive image of Occurrence and the corresponding Inherent lexical aspect. The basic image of the event then undergoes a succession of binary operations involving the contrast of particularisation and generalisation. The mechanism of the binary radical tensor makes possible the analysis of the cognitive image of the event and establish aspectual distinctions: Stative and Non-Stative; Determinate and Indeterminate; Indiscriminate, Semelfactive and Iterative; Perfective and Imperfective. These stages of the cognitive image of the event do not include the dimension of time which appears at the first level of chronogenesis described by Guillaume.

Examples from Russian, English and Turkic languages illustrate the point that languages may differ in representing pre-chronogenetic aspectual distinctions: some of them have regular morphological means for representing certain types of lexical aspect. This is the case of Russian where the morphological opposition Perfective vs. Imperfective dominates the verbal system, and there is a rich derivational inventory of morphological means - suffixes and prefixes - which

are used to create aspectual distinctions of the other levels. In English and Turkic some of the lexical aspects may have variable expression, most often periphrastic, and these aspects, consequently, have the status of *conceptual categories* in the sense of Meshchaninov (1945).

A consistent application of Guillaume's device (binary radical tensor) has been most fruitful in this study in establishing the nature of binary contrasts. The application of such investigative theoretical concepts in this thesis made possible the proposal of a finite set of aspectual distinctions arising at the perceptive level, and of probable cognitive expansions when memory and imagination are involved. The Directional lexical aspect, for example, may produce a generalisation on the basis of memorial images and give rise to the notion of telicity. The Iterative lexical aspect, on the other hand, expands into the notion of Habituality when memory participates in the cognitive image development.

The results of the present research outline a way for the description of aspectual semantic potential of individual Russian verbs and for the classification of verbs into subclasses with the same set of aspectual distinctions.

One of the conclusions of the present thesis is that languages may have a morphological or syntactic representation of aspectual distinctions which arise at both pre-chronogenetic and chronogenetic level yielding verbal forms with cumulation of both lexical and grammatical aspects.

Universals of human consciousness necessarily influence linguistic structure. However, any cognitive image is only a potentiality of representation, and individual languages may choose among the variety of possibilities to represent the same cognitive image. The great advantage of Guillaumean linguistics is that it is looking for universals not in the surface structures, often

arbitrary and unpredictable, but in the underlying mental images and structure of human consciousness. The author expresses the hope that this essay might be seen as a small contribution to the Guillaumean scholarly paradigm.

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